

Cambridge International Examinations Cambridge International General Certificate of Secondary Education



INFORMATION AND COMMUNICATION TECHNOLOGY

0417/31 May/June 2017

Paper 3 Practical Test B MARK SCHEME Maximum Mark: 80

Published

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[Turn over

Question	Answer	Marks				
1	1 Open the file 1731san1.png in a suitable application. Resize the image so that it is 704 x 528 pixels. Save the image with the filename 1731san2.png					
	Image resized to 704 x 528 and saved with new filename1731san2.png1 mark					
2	Remove the right of the image to make it 230 pixels wide and 528 pixels high like this: Save the image with the filename 1731san3.png	2				
	Resized to 230 x 528 pixels1 markBy removal of right 2/31 mark					
3	3 Display the contents of your <i>html_1731</i> folder showing the folder name image dimensions, all file names, extensions and file sizes.					
	Folder created with 5 files copied, file sizes visible 1 mark					
4	Evaluate in your own words other changes that you could make to this image to make it more suitable for use in the web page.	4				
	 (4 from) –1 mark each Colour depth can be changed From 16 bits/channel To 8 bits per channel Reduces storage space and image transmission time by saving in gif format by saving in jpg format 					
	save as jpeg with lower resolution 4 marks					

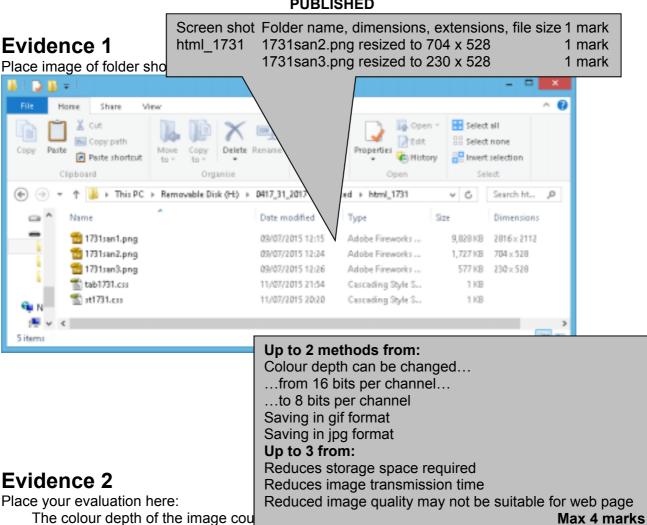
Question			Answer			Marks
5	This web pa with visible Text shown The texts in Replace tex	eb page called 173 age must work in borders and grid in bold must be italics are instru	all browsers ar lines, as showr entered onto yc ctions you mus	n below. our web page. it do.		17
	instructed:					
		Using hyperlin	INS .			
			The design of the second se	set in style h1		
		<place image="" saved<br="">in step 2 here></place>	The function of a hyperlink:	<enter your<br="">answer to question 6 here></enter>		
			set in style h3	set in style h2		
			When used with a website, absolute and relative file paths can be can be	<enter answers<br="" your="">to question 7 here> set as a bulleted list</enter>		
			explained as:	with square bullet		
			set in style h3	points		
			Website created by number, candidate n			
		add appropriate atternative text		set in style h3		
	Browser	In browser			1 mark	
	Table	3 columns and 4	rows		1 mark	
	Tuble	borders visible	0110		1 mark	
	1st row	Using hyperlinks			1 mark	
		as h1			1 mark	
		colspan=3			1 mark	
	2nd row	1st rowspan	=3		1 mark	
		image 1731san3.			1 mark	
		Text The function		00% correct	1 mark	
	3rd row	Correct text in left	cell		1 mark	
		3 answers as bull	eted list		1 mark	
		With square bulle	t points		1 mark	
	4th row	colspan=2			1 mark	
		Correct text in rigi			1 mark	
		Rows 2–4 set as	style h3		1 mark	
		alt text for image			1 mark	
	2	heet settings (or er	,			
	li { }	list-style-type:squ	are		1 mark	
6		e text <i><enter i="" your<=""> in your own wore</enter></i>				2
	To povidate	from one place/pa	an to another		1 mark	
	To havigate	from one place/pa	ge to another		1 mark 1 mark	
					THATK	

Question	Answer	Marks			
7	Replace the text < <i>Enter your answers to question 7 here</i> > with a bulleted list in your own words of three or more items explaining the terms relative file path and absolute file path.				
	 (3 from): 1 mark each Relative path points to current folder so relative links uploaded to server will work Absolute file path points to a location on a storage device so links uploaded to server unlikely to work (unless same structure) 3 marks 				
8	Attach the stylesheet tab1731.css to your webpage	2			
	tab1731.css attached1 markHead and body syntax correct1 mark				

Question		Answer		Marks
9		ed to create a second stylesheet to be add esheet is not finished and contains a num		22
	The web page and most efficient mether	et st1731.css in a suitable software packag stylesheet must work in any browser and nod. All colour codes are in hexadecimal. I ntains no html. The specifications for this	use the Make sure	
	Correct and compl	ete this stylesheet using the information a	bove.	
	Add your name, Ce the start of the styl	entre number and candidate number as a c lesheet.	comment at	
	followed by your c	et in your 1731_html folder. Use the filenar andidate number, e.g. st17319999.css eet to your webpage so that it has a highe t saved in step 8.		
	Comments table { }	/* Candidate details */ width:650px border:5px border-collapse:collapse padding-top:6px; padding-bottom:6px	1 mark 1 mark 1 mark 1 mark 1 mark	
	td{ } table,td {}	padding-left:4px; padding right:4px border:2px border:solid dark green (#005000) These 2 elements in joint section	1 mark 1 mark 1 mark 1 mark	
	h1 { }	color: #005000 font-family: Palatino, ,Times New Roman In speech marks	1 mark 1 mark 1 mark 1 mark	
		,Times ,serif font-size:36px	1 mark 1 mark 1 mark	
	h2,h3,li { } font-size h2 { } h3 { }	font-size:16px one style line used for these 3 styles text-align:left text-align:center	1 mark 1 mark 1 mark 1 mark	
	CSS syntax st1731????.css	Must have ; between properties attached below tab173.css	1 mark 1 mark	

Question	Answer	Marks			
10	Open and examine the file 1731emp.csv in a spreadsheet package.	2			
	Save this file as a spreadsheet with the filename 1731emp and your candidate number, for example, 1731emp9999				
	Place your name, Centre number and candidate number, centre aligned in the header of the page.				
	On the left in the footer add the text Last edited on followed by today's date (automated) and time (automated).				
	Name and numbers in centre of header1 markLast edited on followed by an automated <date> and<time> on the left in the footer1 mark</time></date>				
11	Merge cells A1 to G1.	3			
	 Format this cell so that: text is centre aligned with a white, 24 point, sans-serif font it has a dark green background colour. 				
	Merge cells A1 to G1, centre aligned1 markWhite 24 point sans-serif font1 markDark green background1 mark				
12	Use cells A5 to B14 to create a named range called JC.	1			
	Correct named range 1 mark				
13	In cell D18 enter a function to look up the job description for this employee.	5			
	Lookup used1 markCorrect relative lookup reference – A181 markNamed range JC1 markCorrect return column 21 mark,False for correct only / sorted data1 mark				
14	In cell G18 use a formula to calculate the pay for this employee. This will look up the rate of pay from the Pay rates table and multiply it by the number of hours worked. This formula must include an absolute range, two relative references and must not include a named range.				
	Lookup used1 markCorrect relative lookup reference – C18 (relative reference)1 markRange \$D\$5:\$E\$8 set as absolute reference1 markCorrect return column 2 (,false optional)1 mark*F18 (relative reference)1 mark				
15	Replicate the formulae from steps 13 and 14 for all employee.	1			
	Formulae replicated correctly 1 mark				

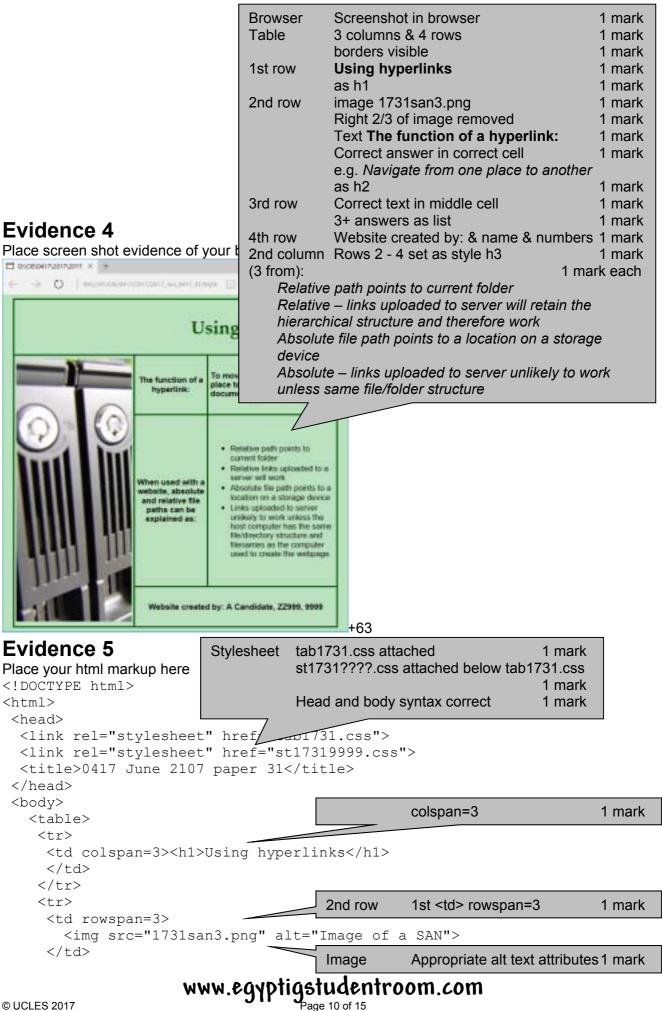
Question	Answer	Marks
16	In cell F60 enter a function to calculate the average number of hours worked by the employees.	1
	Display this to the nearest whole number.	
	=AVERAGE(F18:F58) displayed as an integer 1 mark	
17	In cell G61 use a function to calculate the total weekly wage.	1
	=SUM(G18:G58) 1 mark	
18	Apply appropriate formatting to your spreadsheet.	1
	Dollars applied with 2dp to all currency cells and appropriate cell alignment used 1 mark	
19	Save and print the spreadsheet showing the formulae. Make sure:	2
	it is in landscape orientation it fits on a single page wide the row and column headings are displayed the contents of all cells are fully visible.	
	Single landscape page, all visible1 markRow and column headings displayed1 mark	
20	Print the spreadsheet showing the values. Make sure:	1
	it is in portrait orientation it fits on a single page the row and column headings are not displayed the contents of all cells are fully visible.	
	Fits single portrait page with no row or column headings, all visible1 mark	
21	Hide rows 3–15 inclusive. Hide rows 60 and 61.	1
	Rows hidden from the printout 1 mark	
22	Extract only the employees where the job description includes developer and who work more or less than their contacted hours.	2
	Sort this data into ascending order of name.	
	Print only this extract showing the values. Make sure the:	
	printout fits on a single page contents of all cells are fully visible.	
	Job contains developer and contract hours <> hours worked1 markSorted ascending on Name1 mark	



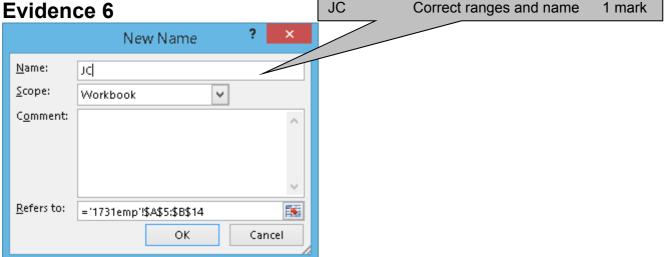
reduced 8 bits per channel. This would allow effect of this would be to reduce the storage transmission time when downloaded on the internet. If it was saved in a jpeg format, the file size could be further reduced by reducing the image quality as you save the file.



		Comment	/* Candidate details */	1 mark	
		table	width:650px	1 mark	
			border-width:5px	1 mark	
			border-collapse:collapse	1 mark	
			padding-top:6px; padding-bottom:6px		
			padding-left:4px; padding-right:4px	1 mark	
		td	border-width:2px	1 mark	
		table,td	solid dark green e.g. #005000	1 mark	
			one style line used for these 2 styles	1 mark	
		h1	color: #005000	1 mark	
			font-family: Palatino	1 mark	
Eviden	ce 3		,Times New Roman	1 mark	
Place scree	enshot of your stylesheet		in speech marks	1 mark	
			,Times	1 mark	
gt7319999.cm	. Noterad		,serif	1 mark	
Ele Edit Fgrmat			font-size:36px	1 mark 1 mark	
and the party of the second		h2,h3,li	h2,h3,li font-size:16px		
/* A Ca	ndidate, ZZ999, 9999		one style line used for these 3 styles	1 mark	
		h2	text-align:left	1 mark	
table	{width:650px;	h3	text-align:center	1 mark	
	border:5px;	li	list-style-type:square	1 mark	
	border-collapse:co	CSS syntax	Must have ; between properties	1 mark	
12821	<i>(</i>)				
td	{border:2px;				
	<pre>padding:6px 4px;}</pre>				
table,td	{border:solid #0050	999;}			
h1	{color:#005000;				
	font-family:Palati	no,"Times	New Roman", Times, serif;		
	<pre>font-size:36px}</pre>				
h2,h3,li	{font-size:16px}				
h2	{text-align:left}				
h3	{text-align:center}	3			
li	{list-style-type:so	luare}			



```
<h3>The function of a hyperlink:</h3>
    >To move the user from one place to another page/ document/
place on the page.</h2>
    <h3>When used with a website, absolute and relative file paths can
be explained as:</h3>
    Bulleted list visible (set )
                                                    1 mark
     -
      Relative path points to current folder
      Relative links uploaded to a server will work
      Absolute file path points to a location on a storage
device
      Links uploaded to server unlikely to work unless the host
computer has the same file/directory structure and filenames as the
computer used to create the webpage.
     Row 4
                                       colspan=2
                                                         1 mark
   <h3>Website created by: A Candidate, ZZ999, 9999</h3>
    </body>
</html>
```



	Last edi	numbers - centre aligne ted on & date and time	– left 1	Mark A Candidate, 225	999, 9999		Correct named range - JC Correct return column - 2	1 mai 1 mai
-	A	В	C	D	E	F	,FALSE (or sorted JC range)	1 mar
1		Tawa	ra We	eb - weekly pa	y calcula	ation - w	eek 1	
2	1							
3	Job codes	manual accord		Pay rates	S			
4	Job code	Job description		Pay code	Pay rate			
5	1	Javascript programmer		A	15			
6	V	Web developer		в	16			
7	W	Web designer		c	18.4	/		
8	s	SQL programmer		D	21.5			
9	G	Graphic designer			/			
10	p	PHP programmer						
11	M	Magento developer						
12	F	Front End developer CSS/HTML						
13		Junior Web developer						
14	Y	Junior Front End developer						
15	al and a second second				D			
16	Employees		-					
17	Job code	Name	Pay code	Job description	Contract hours	Hours worked	Pay	
18	х	Henry Gale	A	=VLOOKUP(A18,JC,2,FALSE)	10	10	=VLOOKUP(C18,\$D\$5:\$E\$8,2,FALSE)*F18	
19		Kurtis Brown	A	=VLOOKUP[A19,JC,2,FALSE]	25	25	=VLOOKUP(C19,\$D\$5:\$E\$8,2,FAL5E)*F19	
20		Clemantine Leadbetter	C		25	25	=VLOOKUP(C20,\$D\$5:\$E\$8,2,FALSE)*F20	
21	G	Christine Hull	8	=VLOOKUP[A21.JC.2.FALSE]	25	15	=VLOOKUP(C21,\$D\$5:\$E\$8,2,FALSE)*F21	
22		Karla Gree Pay Look	up used		1 mark		=VLOOKUP(C22,\$D\$5:\$E\$8,2,FALSE)*F22	
23			•	ve lookup reference –	C18 1 mark		=VLOOKUP(C23,\$D\$5:\$E\$8,2,FALSE)*F23	
24				ute range - \$D\$5:\$E\$			=VLOOKUP(C24,\$D\$5:\$E\$8,2,FALSE)*F24	
25				ute range - שבשט.שבע 1 column – 2	1 mark		=VLOOKUP(C25,\$D\$5:\$E\$8,2,FALSE)*F25	
26		IND Patel			-		=VLOOKUP(C26,\$D\$5:\$E\$8,2,FALSE)*F26	
27		Ruksana G IVIUI	tiplied by	y F18 (relative referen	ice) 1 mark		=VLOOKUP(C27,\$D\$5:\$E\$8,2,FALSE)*F27	
28	х	Angela Akula	A	=VLOOKUP[A28,JC,2,FALSE]	38	38	=VLOOKUP(C28,\$D\$5:\$E\$8,2,FALSE)*F28	
29		Udoka Onyancha	C		30	35	=VLOOKUP(C29,\$D\$5:\$E\$8,2,FALSE)*F29	
30		Billy Green	A	=VLOOKUP(A30,JC,2,FALSE)	20	20	=VLOOKUP(C30,\$D\$5:\$E\$8,2,FALSE)*F30	
31	V	Wesley Smith	В	=VLOOKUP(A31,JC,2,FALSE)	25	25	=VLOOKUP(C31,\$D\$5:\$E\$8,2,FAL5E)*F31	
32		Anthony Campbell	8	=VLOOKUP(A32,JC,2,FALSE)	25	0	#VLOOKUP(C32,\$D\$5:\$E\$8,2,FALSE)*F32	
33	v	Trevor Jones	8	=VLOOKUP[A33,JC,2,FALSE]	25	25	=VLOOKUP(C33,\$D\$5:\$E\$8,2,FALSE)*F33	

Last edited on 28/04/2017 12:30

A Candidate, ZZ999, 9999

	A	6	С		D	E	F	G
34	S	Jasmine Gunn	С	=VLOOKUP(A	34, JC, 2, FALSE)	30	30	=VLOOKUP(C34,\$D\$5:\$E\$8,2,FALSE)*F34
35	Y	Brian Wells	A	=VLOOKUP(A	35, JC, 2, FALSE)	25	25	=VLOOKUP(C35,\$D\$5:\$E\$8,2,FALSE)*F35
36	Y	David Reid	A	=VLOOKUP(A	36, JC, 2, FALSE]	25	35	=VLOOKUP(C36,\$D\$5:\$E\$8,2,FALSE)*F36
37	v	John Vercoe	в	=VLOOKUP(A	37, JC, 2, FALSE]	25	25	=VLOOKUP(C37,\$D\$5:\$E\$8,2,FALSE)*F37
38	W	Lauren Hall	в	=VLOOKUP(A	38, JC, 2, FALSE)	25	35	=VLOOKUP(C38,\$D\$5:\$E\$8,2,FALSE)*F38
39	1	Chloe Rhodes	С	=VLOOKUP(A	39, JC, 2, FALSE)	30	30	=VLOOKUP(C39,\$D\$5:\$E\$8,2,FALSE)*F39
40	Y	Owen Williams	A	=VLOOKUP(A	40, JC, 2, FALSE)	25	25	=VLOOKUP(C40,\$D\$5:\$E\$8,2,FALSE)*F40
41	Х	Lotte Charles	A	=VLOOKUP(A/	41, JC, 2, FALSE)	12	12	=VLOOKUP(C41,\$D\$5:\$E\$8,2,FALSE)*F41
42	V	Jeannie Burke	В	=VLOOKUP(A	42, JC, 2, FALSE)	25	25	=VLOOKUP(C42,\$D\$5:\$E\$8,2,FALSE)*F42
43	W	Jimmy Lee	8	=VLOOKUP(A	43, JC, 2, FALSE)	12	0	=VLOOKUP(C43,\$D\$5:\$E\$8,2,FALSE)*F43
44	V	Dawid Jones	8	=VLOOKUP(A	44, JC, 2, FALSE)	25	30	=VLOOKUP(C44,\$D\$5:\$E\$8,2,FALSE)*F44
45	v	Li Sun Wu						=VLOOKUP(C45,\$D\$5:\$E\$8,2,FALSE)*F45
46	V	cildifotte watson	ell F60		GE(F18:F5	8)	1 mark	=VLOOKUP(C46,\$D\$5:\$E\$8,2,FALSE)*F46
47	v	Joe Norfolk	ell G61	SUM(G	18:G58)		1 mark	=VLOOKUP(C47,\$D\$5:\$E\$8,2,FALSE)*F47
48	v	Duncan Rydell	0		чарскалтисаер	N	Y	=VLOOKUP(C48,\$D\$5:\$E\$8,2,FALSE)*F48
49	v	leuan Williams	В	=VLOOKUP(A	49, JC, 2, FALSE)	25		=VLOOKUP(C49,\$D\$5:\$E\$8,2,FALSE)*F49
50	V	Linda Stuart	В	=VLOOKUP(A	50, JC, 2, FALSE)	25		=VLOOKUP(C50,\$D\$5:\$E\$8,2,FALSE)*F50
51	v	Joanne Floyd	8	=VLOOKUP(A	51, JC, 2, FALSE)	25		=VLOOKUP(C51,\$D\$5:\$E\$8,2,FALSE)*F51
52	V	Sam Smith	в	=VLOOKUP(A	52, JC, 2, FALSE)	20		=VLOOKUP(C52,\$D\$5:\$E\$8,2,FALSE)*F52
53	v	Kate Smith	в	=VLOOKUP(A	53, JC, 2, FALSE)	25		=VLOOKUP(C53,\$D\$5:\$E\$8,2,FALSE)*F53
54	V	Tony Thomson	в	=VLOOKUP(A	54, JC, 2, FALSE)	12		=VLOOKUP(C54,\$D\$5:\$E\$8,2,FALSE)*F54
55	Х	Dougie Ryder	A	=VLOOKUP(A	55, JC, 2, FALSE)	25		=VLOOKUP(C55,\$D\$5:\$E\$8,2,FALSE)*F55
56	v	Wally Weston	в	=VLOOKUP(A	56, JC, 2, FALSE)	25	28	=VLOOKUP(C56,\$D\$5:\$E\$8,2,FALSE)*F56
57	1	Laura Macdonald	C	=VLOOKUP(A	57, JC, 2, FALSE)	30	30	=VLOOKUP(C57,\$D\$5:\$E\$8,2,FALSE)*F57
58	1	Jenna Hoy	С	=VLOOKUP(A	58, JC, 2, FALSE)	25	25	=VLOOKUP(C58,\$D\$5:\$E\$8,2,FALSE)*F58
59							N	
60						Average hours:	=AVERAGE(F18:F58)	
61						Weekly total:		=SUM(G18:G58)
					Printout Replication	-	Column heading	ide, fully visible 1 mark gs displayed 1 mark 1 mark

Last edited on 28/04/2017 12:30

A Candidate, ZZ999, 9999

	Tawara Web -	week	dy pay calcula	ation - w	eek 16	
Job codes			Pay rates			
Job code	Job description		Pay code	Pay rate		
1	Javascript programmer		A	\$15.00		
V	Web developer		В	\$16.00		
W	Web designer		c	\$18.40		
s	SQL programmer			\$21.50		
G	Graphic designer					
Р	PHP progra Top row	Merge a	nd centre align cells	A1 to G1	1 mark	
M	wagento or		point sans-serif for		1 mark	
F				п	-	
Х	Junior Web	Jark gre	en background		1 mark	
Y	Junior Front End developer					
Employees						
Job code	Name	Pay code	Job description	Contract hours	Hours worked	Pay
Х	Henry Gale	A	Junior Web developer	10	10	\$150.00
Х	Kurtis Brown	A	Junior Web developer	25	25	\$375.00
Ρ	Clemantine Leadbetter	С	PHP programmer	25	25	\$460.00
G	Christine Hull	B	Graphic designer	25	15	\$240.00
Y	Karla Greenhalgh	A	Junior Front End developer	12	12	\$180.00
W	Fred Pooley	B	Web designer	25	25	\$400.00
V	Ben Chalmers	B	Web developer	12	12	\$192.00
V	Christopher Lewis	B	Web developer	25	25	\$400.00
W	Rio Patel	B	Web designer	12	12	\$192.00
м	Ruksana Gopaul	D	Magento developer	40	40	\$860.00
х	Angela Akula	A.	Junior Web developer	38	38	\$570.00
Р	Udoka Onyancha	С	PHP programmer	30	35	\$644.00
Y	Billy Green	A	Junior Front End developer	20	20	\$300.00
V	Wesley Smith	В	Web developer	25	25	\$400.00
V	Wally Weston	В	Web developer	25	28	\$448.00
v	Trevor Jones	В	Web developer	25	25	\$400.00
S	Jasmine Gunn	С	SQL programmer	30	30	\$552.00
Y	Brian Wells	A	Junior Front End developer	25	25	\$375.00
V	leuan Williams	B	Web developer	25	10	\$160.00
V	John Vercoe	B	Web developer	25	25	\$400.00
W	Lauren Hall	B	Web designer	25	35	\$560.00
1	Chloe Rhodes	c	Javascript programmer	30	30	\$552.00
Y	Owen Williams	A	Junior Front End developer	25	25	\$375.00
X	Lotte Charles	A	Junior Web developer	12	12	\$180.00
V	Jeannie Burke	B	Web developer	25	25	\$400.00
w	Jîmmy Lee	B	Web designer	12	0	\$0.00
v	Dawid lones	R	Web developer	25	30	\$480.00
v		oolumn		n ¢ 2dn and	12	\$192.00
v			and pay rate colum		25	\$400.00
v	Ave		urs displayed as inte			\$400.00
v	Printout Sing	gle portra	ait page, fully visible	, no row and	30	\$480.00
v		mn head			nark 0	\$480.00
v	Linda Stuart	B	Web developer	25	25	\$400.00
v	Kate Smith	B	Web developer	25	5	\$400.00
v	Sam Smith	B	Web developer	20	20	\$320.00
v	Duncan Rydell	B	Web developer Web developer	20	30	\$480.00
v	Tony Thomson	B	Web developer	4 4	30	\$480.00
¥ V		A	Junior Web developer	$+ $ \wedge	25	
~	Dougie Ryder	_		\vdash		\$375.00
1	David Reid	A	Junior Front End developer	\vdash	35	\$525.00
	Laura Macdonald	C	Javascript programmer		30	\$552.00
,	Jenna Hoy	С	Javascript programmer	25	25	\$460.00
					⊢ <u>−−</u>	
				Average hours:	22	tar 104 CT
				Weekly total:		\$15,101.00

A Candidate, ZZ999, 9999

	A	8	C	D	E	F	G
1		Tawara We	b - week	dy pay calcula	ation - w	eek 16	
2							
16	Employees			21.502		1	
17	Job code	Name	Pay code	Job description	Contract hours	Hours worked	Pay
32	v	Anthony Campbell	в	Web developer	25	0	\$0.00
36	Y	David Reid	A	Junior Front End developer	25	35	\$525.00
44	v	Dawid Jones	8	Web developer	25	30	\$480.00
48	v	Duncan Rydell	8	Web developer	25	30	\$480.00
49	v	leuan Williams	8	Web developer	25	10	\$160.00
51	v	Joanne Floyd	в	Web developer	25	30	\$480.00
53	v	Kate Smith	в	Web developer	25	5	\$80.00
56		Wally Weston	B	Web developer	25	28	\$448.00

Hidden Extract	Rows 3-15 & 60-61 Job contains developer	1 mark
	and contract hours <> hours worked Sorted ascending on Name	1 mark 1 mark

