

Cambridge International Examinations

Cambridge International Advanced Subsidiary and Advanced Level

INFORMATION TECHNOLOGY

9626/02

Paper 2 Practical

May/June 2017

MARK SCHEME
Maximum Mark: 110

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

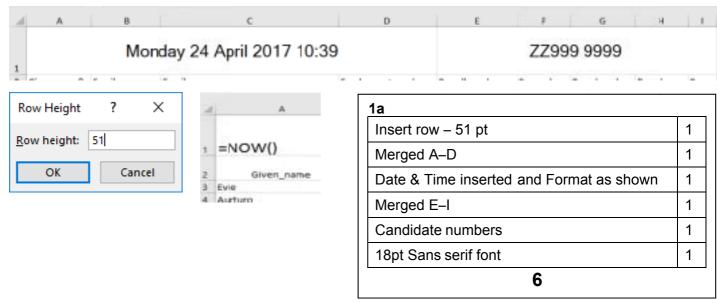
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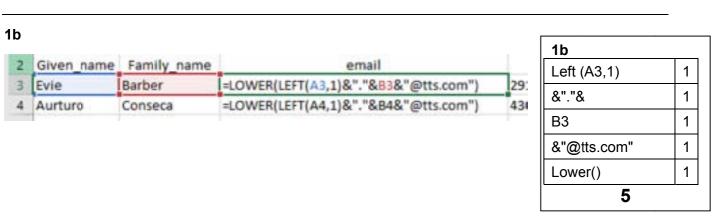
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Task 1a





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1c

Duplicates possible

Method to identify

Suggested solution

4

Examples found

1

1

1

1

1c

Describe the problem with generating the email addresses
Duplicates can be generated

[1]

Describe a method to automatically detect this problem
Use conditional formatting and highlight duplicate values
Any valid

[1]

Give an example of an email address that is affected.							
Rhys	Manning	r.manning@tts.com					
Roger	Manning	r.manning@tts.com					

[1]

Suggest a method of correcting this address

Manually change address by adding a number or a letter

[1]

0	Roger	Manning	ro.manning@tts.com
13	Rhys	Manning	r.manning@tts.com
07	Hatas	Imre	h.imre@tts.com
20	Hajnalka	Imre	hj.imre@tts.com

1c

Example of solution 1
Rhys/Roger Corrected 1
Imre(S) Corrected 1

3

1d

2	Given name	Family name	Email	Employ	Payroll number	Pay scale	Branch code	В
3	Evie	Barber	e.barber@tts.com	2914	=UPPER(LEFT(A3,1)&LEFT(B3,2))&D3&TEXT(G3,"000")	C3	32	IA
4	Aurturo	Conseca	a.conseca@tts.com	4300	=UPPER(LEFT(A4,1)&LEFT(B4,2))&D4&TEXT(G4,"000")	81	32	A

=UPPER(LEFT(A3,1)&LEFT(B3,2))&D3&TEXT(G3,"000")

1d		
Upper()	1	
Left (A3,1)	1	
&Left(B3,2)	1	
&D3&	1	
TEXT() or	1	
G3 (and Works)		1
,"000"	1	
	7	

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1e

Pay =VLOOKUP(LEFT(F3,1),TTSPay_Scales.xlsx!\$A\$2:\$J\$8,MATCH(VALUE(RIGHT(F3,1)),TTSPay_Scales.xlsx!\$A\$2:\$J\$2,0),0)

1e	1e				
Vlook	up()	1			
Left(F	3,1)	1			
Full Range		1			
Final	,0	1			
	4				

<u>1e</u>				
Match()	1			
Right()	1			
(F3,1)	1			
Range Top row	1			
,0	1			
5				

À	A	8	C	D	E	F	G	H	1
1	Given_name	Family_name	email	Employment number	Payroll number	Pay Scale	Branch Code	Branch	Pay
2	Evie	Barber	e.barber@tts.com	2914	EBA2914032	C3	32	Antwerp	€ 28,400
3	Aurturo	Conseca	a.conseca@tts.com	4300	ACO4300032	B1	32	Antwerp	€ 26,000

1e Euros & 0 d.p.

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1f

2	Given	*	Family *	Email		Employn +	Payroll n
12	Joel		Knight	j.knight@tts.com	m	9875	JKN98750
59	Harun	ηĭ	Valencia	h.valencia@tts.	com	4440	HVA4440
105	Endre		Mekek	e.mekek@tts.co	m	7395	EME7395

1f Filter out Es (no deletion)

Antwerp Total	=SUBTOTAL(109,13:119)
Antwerp Average	=SUBTOTAL(101,13:119)
* - t T - t - 1	-51107-0741 (0.13.110)
Antwerp Total Antwerp Average	=SUBTOTAL(9,13:119) =SUBTOTAL(1,13:119)

1f	
Efficient subtotal formula	1
Efficient averages	1
Correct Subtotals	1
Correct averages	1
All branches subtotalled	1
5	

Antwerp Total	€	452,100
Antwerp Average	€	28,256
Marseille Total	€	456,300
Marseille Average	€	28,519
Porto Total	€	270,700
Porto Average	€	30,078
Barcelona Total	€	289,800
Barcelona Average	€	28,980
Gdansk Total	€	559,700
Gdansk Average	€	27,985
Naples Total	€	451,100
Naples Average	€	30,073
Split Total	€	322,400
Split Average	€	29,309
Tirana Total	€	484,300
Tirana Average	€	28,488
Amsterdam Total	€	584,500
Amsterdam Average	€	29,225
Hamburg Total	€	392,700
Hamburg Average	€	28,050

1g

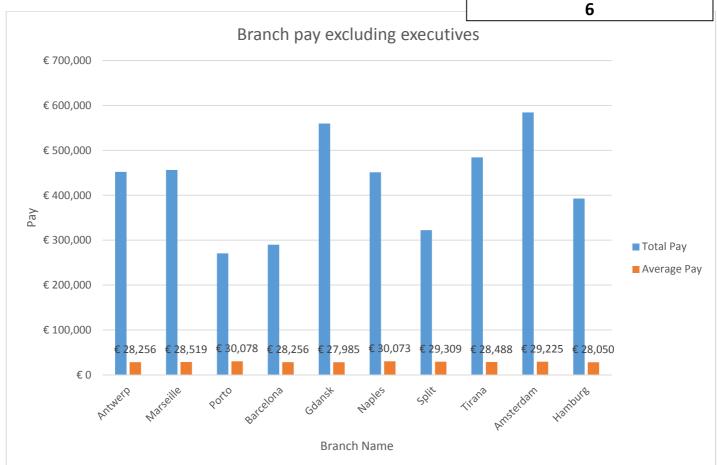
Total Pay	Antwerp	=TTSMerge2.xlsx1\$I\$19
	Marseille	=TTSMerge2.xlsxl\$I\$37
	Porto	=TTSMerge2.xlsx!\$I\$48
	Barcelona	#TTSMerge2.xlsx!\$I\$61
	Gdansk.	=TTSMerge2.xlsx1\$I\$83
	Naples	=TTSMerge2.xlsxlt100
	Split	#TT5Merge2.xlsxlt114
	Tirana	=TTSMerge2.xlsx1t133
	Amsterdam	#TTSMerge2.xisxlt155
	Hamburg	=TTSMerge2.xlsxli171
Average Pay	Antwerp	=TTSMerge2.xlsxlSIS20
	Marseille	=TTSMerge2.xlsxl\$I\$38
	Porto	=TTSMerge2.xlsx!\$I\$49
	Barcelona	=TTSMerge2.xlsx1\$I\$62
	Gdansk	aTTSMerge2.xlsx15IS84
	Naples	#TTSMerge2.xlsx!i101
	Split	#TTSMerge2.xlsxlt115
	Tirana	#TTSMerge2.xlsx8i134
	Amsterdam	«TTSMerge2.xlsx8t156
	Hamburg	#TTSMerge2.xlsx1t172

1g				
All branch totals shown	1			
Branches Total linked to TTSMerge	1			
All branch averages shown	1			
Branches Averages linked to TTSMerge	1			
4	•			

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1h

1 <u>h</u>					
Total Bars	1				
Average bars	1				
Average data labels	1				
Appropriate title	1				
Appropriate axes labelled	1				
Appropriate legend	1				
6					



Task 1i
What is the difference between a spreadsheet function and a spreadsheet formula?

A function is a built in calculation or operation

A formula is entered by a user and may consist of several functions and operations

[2]

Give an example of each from your TTSMerge file.

Example of a function: =SUBTOTAL(109,I3:I19) - any valid

Example of a formula: =LOWER(LEFT(A3,1)&"."&B3&"@tts.com") - any valid

[2]

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Task 2

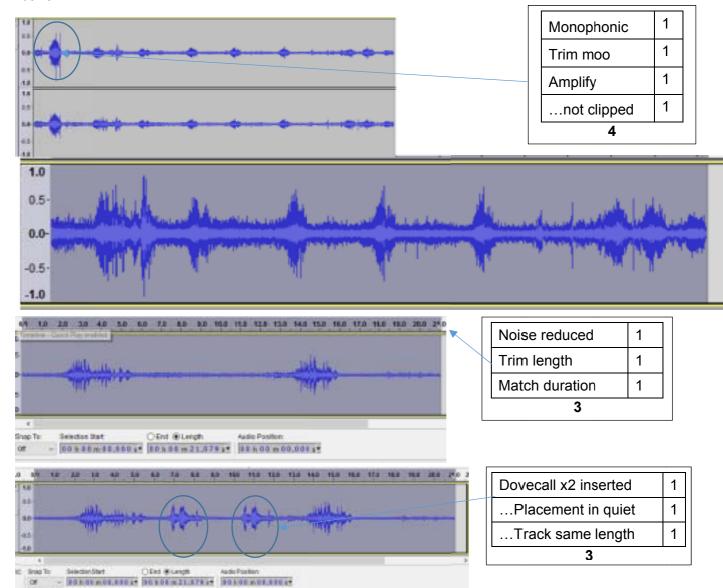
16:19 -1280 x 720	1	Jan-18 Caption	1	Leaves clip	1
Correct transitions	1	2 secs	1	Trimmed	1
Title clip	1	Same position	1	5secs	1
4 secs	1	Both White	1	A chance toCaption	1
Protecting Nature Caption	1	Both 48pt	1	Same font	1
2 secs	1	Both Sans-Serif	1	Same position	1
Centred	1				
Flowers clip	1	Bee clip	1	January 2018 caption	1
Trimmed	1	Correct trim	1	Remainder of clip	1
7 secs	1	London Caption	1	Black	1
An internationalCaption	1	After 1 sec	1	Same font – 48pt	1
Same font	1	3 secs	1	Position(Both)	1
Same position	1				





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Task 3



Soundtrack saved as Soundtrack128.mp3 at 128kbs	1
Soundtrack added to movie	1

[2]

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Task 3b

Enter the size of the DoveCall128.mp3 file	27 KB
Enter the size of the DoveCall256.mp3 file	54 KB
Enter the size of the DoveCall.wav file	140 KB

[3]

Explain the difference in these file sizes.

DoveCall128.mp3 is a compressed file exported with a bit rate of 128 kbps.

DoveCall256.mp3 is a compressed file exported with a higher bit rate so more data is saved and the file is bigger.

DoveCall.wav is the original unprocessed recording so all the data is saved resulting in the biggest file size.

[3]

Give an advantage of each of the two file types.

All the data is preserved in a .WAV file so processing can be carried out on the original recording.

.MP3 files are compressed so file sizes are smaller.

[2]

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