Name:	 Class:	

Sec 4 Computing Prelim 2018 Paper 2

Task 1

1	Saved as MYJOBS_ <class>_<class_index_number>_<your_name></your_name></class_index_number></class>
2	=RIGHT(D4,2)
	Propagate for whole column
3	=VLOOKUP(E4,\$B\$18:\$C\$23,2,FALSE) + (F4*G4)
	Propagate for whole column
4	Conditional Formatting blue background for total cost above \$50
5	=COUNTIF(\$C\$4:\$C\$13,E18)
	Output: 4,1,1,2,1,1 (1 mark for every 3 correct formula)
6	Total Cost in bold in G14
	=SUM(H4:H13) in H14
	Subtotal:

Task 2

7a	Correct code for largest digit and correct output and printing of output	
7b	Correct code for copying uppercase letters	
	Correct output and printing of uppercase letters in a list	
7c	Correct testing of user input for 6 characters in length	
	Ask user for input again	
	Display suitable error message	
8	Saved as as VARANALYSIS_ <class>_<class_index_number>_<your_name></your_name></class_index_number></class>	
	Correct code for calculating total	
	Correct code for calculating average	
	Correct output and printing of average	
	Subtotal:	

Task 3

```
import math #1m or they use power 0.5
number steps = 0 \#1m
current location = [0,0]
print("Current location: ", current location)
while True:
    direction = input("Enter the direction (up, down, left,
right). Type exit to end: ")
    if direction == "exit":#1m
        break#1m
    else:
        number_steps = int(input("Enter the number of steps to
move: "))#1m
        if direction == "up":#1m
            current location[1] += number steps
        elif direction == "down":
            current location[1] -= number steps
        elif direction == "left":
            current location[0] -= number steps#1m
        elif direction == "right":#1m
            current location[0] += number steps#1m
        print("\nCurrent location: ", current location)
                     print("Distance travelled: ",
           round(math.sqrt(current location[0]**2 +
                current location[1]**2),2))#1m
                                                        Subtotal:
                                                                  10
```

10	Initialise counter variables with suitable data types	
	Use of for / while loops correctly	
	Obtains (7 valid sets of) user input Manipulation of input data to retrieve ages (e.g. string slicing / list.split())	
Type forcing of input to float		
	Validates input are floats and ensures valid input	
	Validates input are between 40 and 70 (inclusive) and ensures valid input	
	Calculates average category timing correctly	
	Rounds off average age to nearest year (e.g. round() / int() / % / //)	
	Print timings to 2 decimal places (e.g. using print formatting)	
	Q10 SUBTOTAL	
11	Category & Ave Timing printed correctly & accurately (excludes rounding inaccuracies, includes tabs, spelling & caps)	

Medley block printed accurately & correctly (excludes rounding
inaccuracies, includes tabs, spelling & caps)
Q11 SUBTOT

12	Validation of input should account for "-"
	Account for varying denominators in finding average category timings
	Account for lack of medley timing when a swimmer fails to participate in all categories
	Prints private test case accurately and correctly (Inputs are all "-")
	Prints output accurately and correctly (ECF from Q11)
	Q12 SUBTOTAL
13	Asks for user input for number of participants / allows users to end data entry where required
	Ensures that there must be a minimum of 4 participants / entries
	Q13 SUBTOTAL