Marking Scheme for COMP Prelim Practical Exam P2 2019

Name : _____ Class: _____

Task1 (10)	Task2 (10)	Task3 (10)	Task4 (20)	Total (50)

No	Description
1.	**One** mark for working top formula, **one** mark for rest =VLOOKUP(B7,$E$29:$G$35,3,TRUE) =VLOOKUP(B8,$E$29:$G$35,3,TRUE) =VLOOKUP(B9,$E$29:$G$35,3,TRUE) =VLOOKUP(B10,$E$29:$G$35,3,TRUE) =VLOOKUP(B11,$E$29:$G$35,3,TRUE) =VLOOKUP(B12,$E$29:$G$35,3,TRUE) =VLOOKUP(B13,$E$29:$G$35,3,TRUE) =VLOOKUP(B14,$E$29:$G$35,3,TRUE) =VLOOKUP(B15,$E$29:$G$35,3,TRUE) =VLOOKUP(B16,$E$29:$G$35,3,TRUE) =VLOOKUP(B17,$E$29:$G$35,3,TRUE) =VLOOKUP(B18,$E$29:$G$35,3,TRUE) =VLOOKUP(B19,$E$29:$G$35,3,TRUE) =VLOOKUP(B20,$E$29:$G$35,3,TRUE) =VLOOKUP(B21,$E$29:$G$35,3,TRUE) =VLOOKUP(B22,$E$29:$G$35,3,TRUE) =VLOOKUP(B23,$E$29:$G$35,3,TRUE) =VLOOKUP(B24,$E$29:$G$35,3,TRUE)
2.	**One** mark for working top formula, **one** mark for rest =IF(C7>2,(C7-2)*0.1%,0) =IF(C8>2,(C8-2)*0.1%,0) =IF(C9>2,(C9-2)*0.1%,0) =IF(C10>2,(C10-2)*0.1%,0) =IF(C11>2,(C11-2)*0.1%,0) =IF(C12>2,(C12-2)*0.1%,0) =IF(C13>2,(C13-2)*0.1%,0) =IF(C14>2,(C14-2)*0.1%,0) =IF(C15>2,(C15-2)*0.1%,0) =IF(C16>2,(C16-2)*0.1%,0) =IF(C17>2,(C17-2)*0.1%,0) =IF(C18>2,(C18-2)*0.1%,0) =IF(C19>2,(C19-2)*0.1%,0) =IF(C20>2,(C20-2)*0.1%,0) =IF(C21>2,(C21-2)*0.1%,0) =IF(C22>2,(C22-2)*0.1%,0) =IF(C23>2,(C23-2)*0.1%,0) =IF(C24>2,(C24-2)*0.1%,0)
3.	**One** mark for working top formula, **one** mark for rest =D7+E7 =D8+E8 =D9+E9 =D10+E10 =D11+E11 =D12+E12 =D13+E13 =D14+E14

	=D15+E15 =D16+E16 =D17+E17 =D18+E18 =D19+E19 =D20+E20 =D21+E21 =D22+E22 =D23+E23 =D24+E24	
4.	**One** mark for working top formula, **one** mark for rest =FV(F7,C7,0,B7) =FV(F8,C8,0,B8) =FV(F9,C9,0,B9) =FV(F10,C10,0,B10) =FV(F11,C11,0,B11) =FV(F12,C12,0,B12) =FV(F13,C13,0,B13) =FV(F14,C14,0,B14) =FV(F15,C15,0,B15) =FV(F16,C16,0,B16) =FV(F17,C17,0,B17) =FV(F18,C18,0,B18) =FV(F19,C19,0,B19) =FV(F20,C20,0,B20) =FV(F21,C21,0,B21) =FV(F22,C22,0,B22) =FV(F23,C23,0,B23) =FV(F24,C24,0,B24)	
5.	=SUM(B5:B24)	
6.	=COUNTIF(B5:B24,">=100000")	
7.	a)	`for count in range (20):`
	b)	`# initialized before for loop` `fastest = 99999`

		`# within for loop, after timing input is received`
		`    if timing < fastest:`
		`        fastest = timing`
		`        print("This is a new record timing!")`

	c)	# within for loop, immediately after timing input is received **while timing<0 or timing>30:** **print("Invalid timing entered.")** **timing = float(input("Enter shuttle run timing (s) : "))**	
8.	# initialized before for loop **n = int(input("Enter number of timings to record: "))**		
	# modify conditions of for loop for count in range (**n**):		

9.

```
age = 0
rejected = 100
Eligible = 0
age = int(input("Please enter student's age: " )
result = float(input("Please enter proficiency test score: "))
while age != 0 or result != 0:
    if age < 16  or age > 18 or result < 60
        if age < 16:
            print("Age must be at least sixteen years.")
        elif age < 18:
            print("Age must not be more than eighteen years.")
        if result < 60:
            print("Proficiency test score must be at least 60.")
        rejected = rejected - 1
        print("Student  is  NOT  eligible  for  job  attachment
programme.")
else:
        print("Student is eligible for job attachment programme."
        eligible = eligible + 1

        age = int(input("Please enter student's age: " ))
    result = float(input("Please enter proficiency test score: ")

print("Number of students eligible: " eligible)
print("Number of students rejected: ", rejected)
```

Corrected lines

```
rejected = 0
eligible = 0
age = int(input("Please enter student's age: " ))
while age != 0 and result != 0:
    if age < 16  or age > 18 or result < 60:
        elif age > 18:
        rejected = rejected + 1
    else:
    # increase indentation to 1 tab
    age = int(input("Please enter student's age: " ))
    # reduce indentation to 1 tab
print("Number of students eligible: ", eligible)
```

OR

```
print("Number of students eligible: " + str(eligible))
```

10.	input locking password and unlocking password	
	validation of locking password (6 characters long)	
	…… and outputs an error message if invalid and continuously request for another locking password	
	…… or a success message if valid	
	checks if the locking password matches the unlocking password	
	……and outputs appropriate message if they match	
	if unlocking password does not match locking password:	
	……appropriate algorithm is used to check if wrong password has been entered, and request for an unlocking password again up to 3 times	
	……outputs the appropriate message if wrong password entered less than 3 times	
	……outputs the appropriate message if wrong password entered 3 times (or more)	
	……outputs the appropriate message if correct password entered subsequently	
11.	Test 1: output of the following messages in bold are shown: Enter password to lock: 53423 **Invalid password.** **Enter password to lock:**	
	Test 2: output of the following messages in bold are shown: Enter password to lock: 534237 **Safe is locked. Unlock with the same password.** Enter password to unlock safe: 534237 **Safe is unlocked.**	
	Test 3: output of the following messages in bold are shown: Enter password to lock: 534237 **Safe is locked. Unlock with the same password.** Enter password to unlock safe: 732435 **Wrong Password. Enter password to unlock safe:** 534237**.** **Safe is unlocked.**	
	Test 4: output of the following messages in bold are shown: Enter password to lock: 534237 **Safe is locked. Unlock with the same password.** Enter password to unlock safe: 732435 **Wrong Password. Enter password to unlock safe:** 732435**.** **Wrong Password. Enter password to unlock safe:** 732435**.** **Exceeded maximum tries. Please contact concierge to unlock.**	
12.	Extend: use of while loop	

	……input for re-entered password	
	……checks if re-entered password matches the password	
	……outputs the appropriate message when passwords don't match	
13.	Extend : use of while loop	
	……repeatedly requests for new locking password after safe is unlocked	
	Total	