**Assignment 2 (submit in one single text file)**

**Q1.**

**Part a**

Write a function “paytable” to calculate and print out the pay for part time staff based on the number of working hours. Input parameter to the function is number of hours (in whole number) . Your calculation of pay **cannot be hardcoded in a formula**, meaning that you have to use the for loop to process **EACH** hour.

* + 1st – 3rd hour: $6 per hour
  + 4th – 6th hour: $7 per hour
  + 7th hour onwards: $8 per hour

**Part b**

Write a Python program to ask the staff to enter the number of working hours and call the function “paytable”

**Q2.**

Design and implement a main menu for an **ATM system**. The menu should present the available options and allow users to choose an option. The main menu screen should look like below.

Main Menu

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1. Balance Inquiry
2. Withdrawal
3. Deposit
4. Exit

Please enter an option (1 to 4):

**Instructions for Option 1**

1. List of account numbers should be showed and then an account number will need to be entered
2. Display account number and amount after each transaction.
3. Return to main menu

**Instructions for Options 2 and 3**

1. List of account numbers should be showed and then an account number will need to be entered
2. Followed by asking amount to be transacted
3. Friendly messages should be prompted if insufficient balance for option 2
4. Display account number and amount after each transaction.
5. Balance in account should be updated
6. Return to main menu after options 2 or 3 is completed.

* Account balance should have dollars and cents value e.g. $1.23
* Account balance should NOT have negative value e.g. -1.23
* All amounts entered should be a positive real number e.g. 12.34
* All entries should be validated and all errors should be exceptionally handled as such no crash out
* Documentation with comments should be provided as and when it’s appropriate in your program

**OR**

Design and implement a main menu for **ordering system** as follows, the main menu should present the available options and allow users to choose an option. The main menu screen should look like below.

Main Menu

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1. Product list
2. Product availability
3. Order placement
4. Exit

Please enter an option (1 to 4):

**Instructions for Options**

1. Option 1 needs to show all the product name , product ID and price
2. Option 2 needs to show the quantity of the product upon entering the product ID
3. Option 3 needs to allow user to enter product ID and quantity to be ordered, a friendly message should be prompted if there is an insufficient stock. If sufficient stocks, ask the user for confirmation to order, remove the order if no confirmation entered by user. In addition, quantity for that product need to be updated for the confirmed transaction.
4. Return to main menu after options 1 or 2 or 3 is completed.

* Price should have dollars and cents value e.g. 1.23
* All entries should be validated and all errors should be exceptionally handled as such no crash out
* Documentation with comments should be provided as and when it’s appropriate in your program