

Python Worksheet

Exercise 1:

The Python program below displays the ATM menu shown on the right hand side.

```
# This code displays the main ATM menu
print("\t|-----|")
print("\t\t LCCS BANK LIMITED\t|")
print("\t\t ATM Main Menu\t\t|")
print("\t\t\t\t\t|")
print("\t\t1. Balance Enquiry\t|")
print("\t\t2. Cash Lodgement\t|")
print("\t\t3. Cash Withdrawal\t|")
print("\t\t4. Cash Transfer\t|")
print("\t\t5. Change PIN\t\t|")
print("\t\t6. Other Services\t|")
print("\t\t\t\t\t|")
print("\t\t7. Exit\t\t\t|")
print("\t|-----|")
print("\t\t\t\t\t|")
print("\t| CHOOSE AN OPTION >> \t\t|")
print("\t\t\t\t\t|")
print("\t|-----|")
print("")
```

```
-----|
LCCS BANK LIMITED
ATM Main Menu

1. Balance Enquiry
2. Cash Lodgement
3. Cash Withdrawal
4. Cash Transfer
5. Change PIN
6. Other Services

7. Exit
-----|
CHOOSE AN OPTION >>
-----|
```

- Key in the code above, make sure it runs without errors.
- Make a new Python File and design and implement a menu for an application of your choice (Example: Game Instructions, Online Library Menu, Fast Food Order Screen)
You can use the space below to design it before you program.

Exercise 2:

There are 7 Python Assignment Statements and 7 incomplete English sentences shown below.

Match each Python statement to an English sentence.

Note: One sentence is incorrect and cannot be matched.

The value entered by the user is stored in the variable _____

The English vowels are _____ to the variable _____

The value ____ is stored in the variable called rate.

The value *daysLeft* assigned to the variable, _____

The value *Alex* assigned to the variable, _____

The variable _____ is initialised to 167

The value of _____ is _____ by the value of *hoursWorked* and the result is stored in the variable _____

`rate = 18.27`

`pwd = input("Password: ")`

`daysLeft = 167 - daysWorked`

`daysLeft = 167`

`name = "Alex"`

`vowels = "AEIOUaeiou"`

`pay = hoursWorked * rate`

Exercise 3:

Which of the following are legal variable names?

- a) `student.Number`
- b) `x`
- c) `1x`
- d) `x1`
- e) `input`
- f) `number`
- g) `20`
- h) `h20`
- i) `PPSN`
- j) `ppsn`
- k) `person name`
- l) `address`
- m) `date_of_birth`
- n) `2+4`

Exercise 4:

Look at each of the following programs.

Write what you think the output will be.

Type in each program separately and run it.

Check if you were correct.

Comment the code to say what it does (remember a comment is started with a #)

PROGRAM 1

```
1. goals = 0
2. goals = goals + 1
3. print("The value of goals is", goals)
```

PROGRAM 2

```
1. answer = 1+2
2. print(answer)
3. value1 = answer+3
4. value2 = 1+2+3
5. print(value1, value2)
```

PROGRAM 3

```
1. a = 10
2. b = 5
3. temp = a
4. a = b
5. b = temp
```

PROGRAM 4

```
1. accountBalance = 1000
2. withdrawalAmount = 600
3. accountBalance = accountBalance - withdrawalAmount
```

PROGRAM 5

```
1. days = 2
2. hrs = 24
3. mins = 60
4. total = days*hrs*mins
5. print(total)
```