

## Assignment: 01

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## # Question 1

### Source code Screenshot

```
python > Assignments > Assignment1 > assignment1.py > ...
1  # Created by: Shreejana Shrestha || Student Id : C0930321
2
3  print("Question 1")
4  print("-----")
5  # getting username input from the user
6  username = input("Enter the username: ")
7  remaining_attempts = 3 # max attempt to enter the password
8
9  if username == "Tim": # Checking the username with Tim
10     #
11     while remaining_attempts > 0:
12         password = input("Enter the password: ") #getting the password form user
13         if password == "12345": # Checking the username
14             print("Successful Attempt! Correct Username and password")
15             break
16         else:
17             remaining_attempts -= 1
18             if remaining_attempts > 0:
19                 print(f"Incorrect password. You have {remaining_attempts} attempt(s) left. Please try again.")
20             else:
21                 print("Sorry! You have used all your attempts.")
22     else:
23         print("Your username is incorrect! Please enter a valid username.")
```

## # output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C& C:/Users/sthas/AppData/Local/Programs/Python/Python312/python.exe "c:/Users/sthas/AppData/Local/Programs/Python/Python312/python.exe "c:/Users/sthas/OneDrive - Lambton College/Assignments/Assignment1/assignment1.py"
Question 1
-----
Enter the username: AAA
Your username is incorrect! Please enter a valid username.
PS C:\Users\sthas\OneDrive - Lambton College\lambton\Term 2\Assignments> & C:/Users/sthas/OneDrive - Lambton College/lambton/Term 2/Assignments/python/Assignments/Assignment1/assignment1.py
Question 1
-----
Enter the username: Tim
Enter the password: 123
Incorrect password. You have 2 attempt(s) left. Please try again.
Enter the password: 123
Incorrect password. You have 1 attempt(s) left. Please try again.
Enter the password: 123
Sorry! You have used all your attempts.
PS C:\Users\sthas\OneDrive - Lambton College\lambton\Term 2\Assignments> & C:/Users/sthas/OneDrive - Lambton College/lambton/Term 2/Assignments/python/Assignments/Assignment1/assignment1.py
Question 1
-----
Enter the username: Tim
Enter the password: 123
Incorrect password. You have 2 attempt(s) left. Please try again.
Enter the password: 123
Incorrect password. You have 1 attempt(s) left. Please try again.
Enter the password: 12345
Successful Attempt! Correct Username and password
PS C:\Users\sthas\OneDrive - Lambton College\lambton\Term 2\Assignments>
```

## # Question 2

### Source code Screenshot

```
python > Assignments > Assignment1 > assignment1Q2.py > ...
1  class Rectangle:
2      def __init__(self, length, width):
3          self.length = length
4          self.width = width
5
6      def perimeter(self):
7          return 2 * (self.length + self.width)
8
9      def area(self):
10         return self.length * self.width
11
12     def display(self):
13         print(f"Length(L) = {self.length}")
14         print(f"Width(W) = {self.width}")
15         print(f"Perimeter of rectangle(P) = {self.perimeter()}")
16         print(f"Area of rectangle(A) = {self.area()}")
17
18     class Parallelepiped(Rectangle):
19         def __init__(self, length, width, height):
20             super().__init__(length, width)
21             self.height = height
22
23         def volume(self):
24             base_area = self.area() * self.height
25             volume = base_area * self.height
26             return volume
27
28         def display(self):
29             print(f"Volume of Parallelepiped = {self.volume()}")
30
```

## # Output

```
● PS C:\Users\sthas\OneDrive - Lambton College\lambton\Term 2\Assignmen
/OneDrive - Lambton College/lambton/Term 2/Assignments/python/Assignm
Question 2
-----
Enter the details of rectangular object
Enter length (L): 16
Enter width (W): 12
Enter height (H): 10
Length(L) = 16m
Width(W) = 12m
Perimeter of rectangle(P) = 56m
Area of rectangle(A) = 192sq.m
Volume of Parallelepiped = 19200cubic.m
```