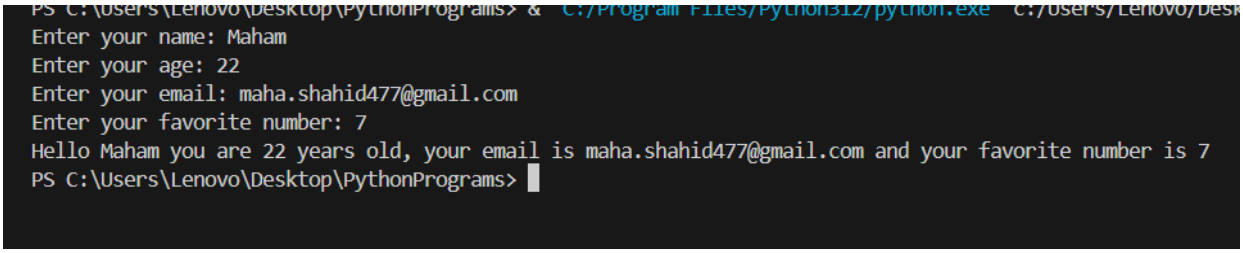
Name **Maham Shahid**

Student **BS Software Engineering**

Bytewise **Course Machine Learning**

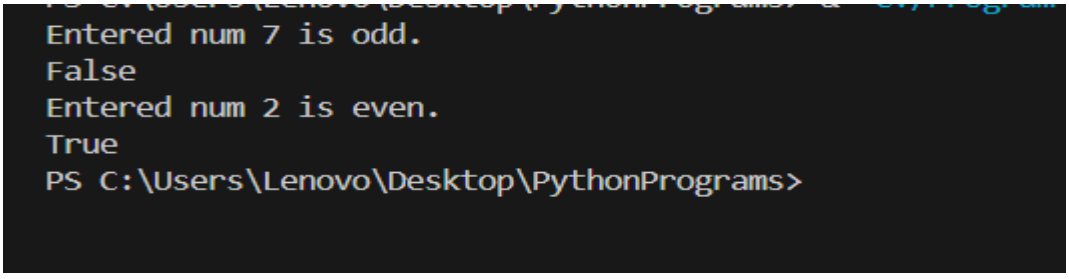
Question 01)

In Question 1 I take input of name, email, number, and age of a person. Then I make dictionary of all these inputs. Make function of valid email format and then our code is complete.



Question 02)

In question 2 I make a function for to find even numbers. In this function I put condition of if and if-else to find even and odd numbers and print the statements according to particular scenario. In the last I call the function.



Question 03)

In question 3 I make a function for conversion of temperature into Celsius (C) or Fahrenheit (F) and implement conditions in this function. I use .upper() with the condition statement it tells that

if user put small letter for conversion so it take it as capital and don’t show any error. In the last I call the function and use print statements according to particular scenario.

```
PS C:\Users\Lenovo\Desktop\PythonPrograms> & "C:/Program Files/Pyt
Enter temperature: 23
Enter desired scale in Celsius (C) or Fahrenheit (F): F
Temperature in Fahrenheit is: 73.4
```

Question 04)

In question 4 I make two functions one is for taking the maximum and minimum numbers and the other function have conditions that distinguished between the maximum and the minimum numbers. I use for loop for taking the 5 numbers from the user and the program tell that what is the maximum number and the minimum number in the list. In last I call the function.

```
Enter number: 1
Enter number: 2
Enter number: 5
Enter number: 4
Enter number: 7
The maximum number is: 7.0
The minimum number is: 1.0
PS C:\Users\Lenovo\Desktop\PythonPrograms>
```

Question 05)

In question 5 I make the array of name student. And then use the for loop to take the students information and the for loop limit is 3. Make the dictionary of name stud_dic that store the student details and apply the for loop that runs through the stud_dic and print the student details.

```
Student 1 details
Enter the name of the student: azlan
Enter the age of the student: 21
Enter the grade of the student: A
Student 2 details
Enter the name of the student: alihan
Enter the age of the student: 22
Enter the grade of the student: A
Student 3 details
Enter the name of the student: Konain
Enter the age of the student: 23
Enter the grade of the student: B

Student details are:
Name: azlan Age: 21 Grade: A
Name: alihan Age: 22 Grade: A
Name: Konain Age: 23 Grade: B
PS C:\Users\Lenovo\Desktop\PythonPrograms>
```

Question 06)

In the question 6 I make the dictionary for inventory quantity, maximum inventory, and the inventory item. Apply the condition of If and else in this we make sure that inventory quantity doesn't go down below 0. To add the items we simply write the number but if we want to decrease the items from the inventory so we write negative sign with the number. Then I make the inventory in which I write all the items present in the inventory and use for loop to change in the quantity of the items.

```
Initial inventory: {'bread': 10, 'eggs': 23, 'oranges': 16, 'grapes': 15, 'papaya': 13}
Enter the item name to update: eggs
Enter the quantity to add/remove foreggsuse negative values for removal: -2
Enter the item name to update: oranges
Enter the quantity to add/remove fororangesuse negative values for removal: 3
Enter the item name to update: papaya
Enter the quantity to add/remove forpapayause negative values for removal: 0

Updated inventory: {'bread': 10, 'eggs': 21, 'oranges': 19, 'grapes': 15, 'papaya': 13}
PS C:\Users\Lenovo\Desktop\PythonPrograms>
```