

Name: Preet Sojitra

Roll No: 21BCP388

Assignment-3

1. Input an integer , and print the multiplication table for the number.

Code:

```
#Input an integer, and print the multiplication table for the number.  
  
num = int(input("Enter an integer: "))  
  
i=1  
  
while i<=10:  
    print(f"{num} X {i} = {num*i}")  
    i +=1
```

Output:

```
Enter an integer: 5  
5 X 1 = 5  
5 X 2 = 10  
5 X 3 = 15  
5 X 4 = 20  
5 X 5 = 25  
5 X 6 = 30  
5 X 7 = 35  
5 X 8 = 40  
5 X 9 = 45  
5 X 10 = 50
```

2. Input 10 characters using while loop and count how many vowels are there.

Code:

```
count = 0  
i = 1  
while i<=10:  
    chars = input("Enter a character: ")  
    if chars == "a" or chars == "e" or chars == "i" or chars == "o" or chars == "u":  
        count +=1  
    i += 1  
print(f"There are {count} vowels")
```

Output:

```
Enter a character: a
Enter a character: b
Enter a character: c
Enter a character: d
Enter a character: e
Enter a character: f
Enter a character: g
Enter a character: h
Enter a character: i
Enter a character: j
There are 3 vowels
```

- Find sum of numbers from 1 to 100 which are divisible by either 2 or 3. (Hint : use while loop + compound if statement -"or")

Code:

```
sum = 0
i = 1
while i<=100:
    if i%2 == 0 or i%3 == 0:
        sum = sum + i
    i += 1
print("Sum is: ", sum)
```

Output:

```
$ python 3.py
Sum is: 3417
```

- Input a float number which will be the side of a square, prompt user to enter a positive value if user inputs a negative value. Finally calculate the area of the square. (Hint : use "continue")

Code:

```
side = float(input("Enter side of square: "))
while True:
    if side > 0:
        area = side * side
        print("Area of square is: ", area)
        break
```

```
else:  
    print("Please enter positive value")  
    side = float(input("Enter side of square: "))  
    continue
```

Output:

```
$ python 4.py  
Enter side of square: 4  
Area of square is: 16.0  
  
Preet Sojitra@DESKTOP-3R4G8F7 MINGW64 /c/Preet (E;)/Preet/PDEU/Sem-2/Python/Assignments/Assignment_3  
$ python 4.py  
Enter side of square: -8  
Please enter positive value  
Enter side of square: 8  
Area of square is: 64.0
```