Assignment- 2

Name: Deepashri Dabhade

1.

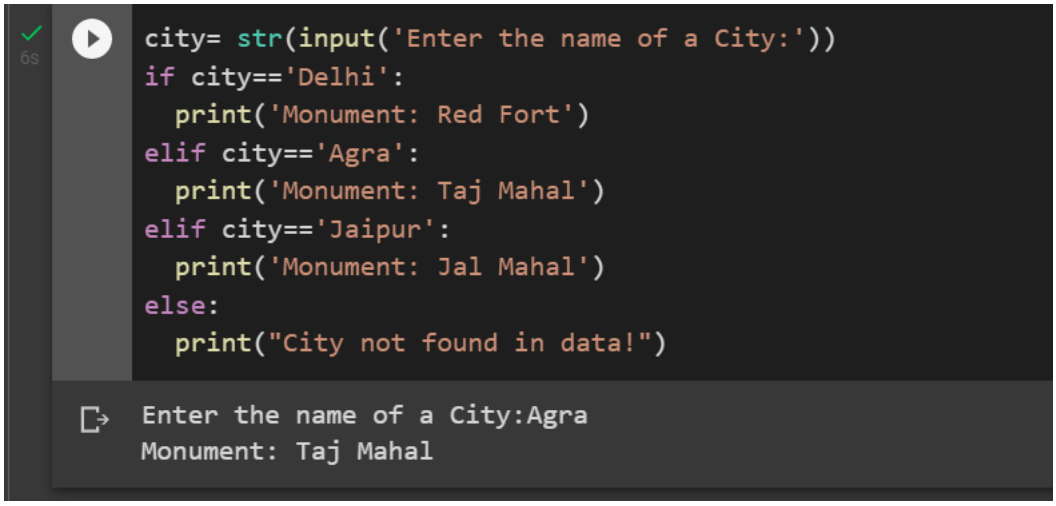
```
marks= float(input("Enter the Percentage:"))
if marks > 90:
  print('You have received Grade "A"!!')
elif marks >80 and marks <=90:
  print('You have received Grade "B"!!')
elif marks >=60 and marks <=80:
  print('You have received Grade "C"!!')
else:
  print('You have received Grade "D"!!')
```

```
Enter the Percentage:34
You have received Grade "D"!!
```

2.

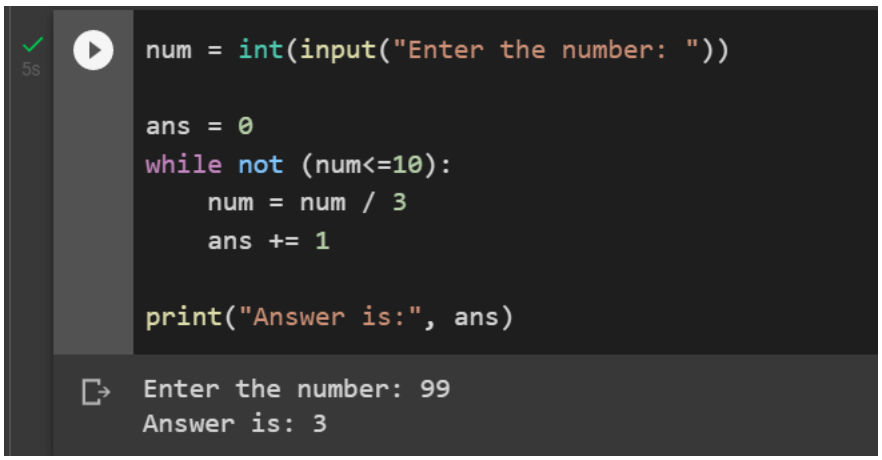
```
price= float(input("Enter the Price of the bike in Rs.:"))
if price >100000:
  print('Tax is 15%')
elif price >50000 and price <=100000:
  print('Tax is 10%')
else:
  print('Tax is 5%')
```

```
Enter the Price of the bike in Rs.:340000
Tax is 15%
```

3. 

```
city= str(input('Enter the name of a City:'))
if city=='Delhi':
  print('Monument: Red Fort')
elif city=='Agra':
  print('Monument: Taj Mahal')
elif city=='Jaipur':
  print('Monument: Jal Mahal')
else:
  print("City not found in data!")
```

```
Enter the name of a City:Agra
Monument: Taj Mahal
```

4. 

```
num = int(input("Enter the number: "))

ans = 0
while not (num<=10):
    num = num / 3
    ans += 1

print("Answer is:", ans)
```

```
Enter the number: 99
Answer is: 3
```

5. Python while loop is used to run a block code until a certain condition is met. Here, a while loop evaluates the condition. If the condition evaluates to true, the code inside the while loop is executed. A "While" Loop is used to repeat a specific block of code an unknown number of times, until a condition is met. For example, if we want to ask a user for a number between 1 and 10, we don't know how many times the user may enter a larger number, so we keep asking "while the number is not between 1 and 10".

   Example:
   num = int(input("Enter the number: "))

   ans = 0

```
while not (num<=10):
    num = num / 3
    ans += 1

print("Answer is:", ans)
```

6.

```
#nested while loop to print 3 different patterns
i= '*'
num=1
while num<=5:
  print(i)
  num= num+ 1
  i=i+'*'
```

```
*
**
***
****
*****
```

```
rows= 5
i=1
while i<=rows:
  j=1
  while j<=i:
    print((i*2-1),end=' ')
    j=j+1
  i=i+1
  print(' ')
```

```
1
3 3
5 5 5
7 7 7 7
9 9 9 9 9
```

```
rows= 5
i=1
while i<=rows:
  print((i**3))
  i=i+1
```

```
1
8
27
64
125
```

7.

```
#reverse a while loop to display numbers from 10 to 1
a=10
while a>=1:
  print(a)
  a=a-1
```

```
10
9
8
7
6
5
4
3
2
1
```

8.

```
#reverse a while loop to display numbers from 10 to 1
a=10
while a>=1:
  print(a)
  a=a-1
```

```
10
9
8
7
6
5
4
3
2
1
```