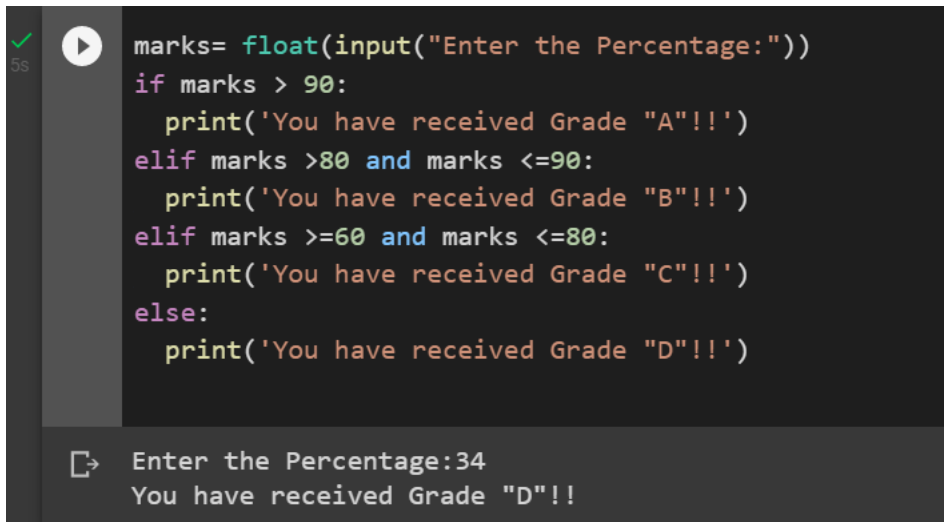


Assignment- 2

Name: Deepashri Dabhade

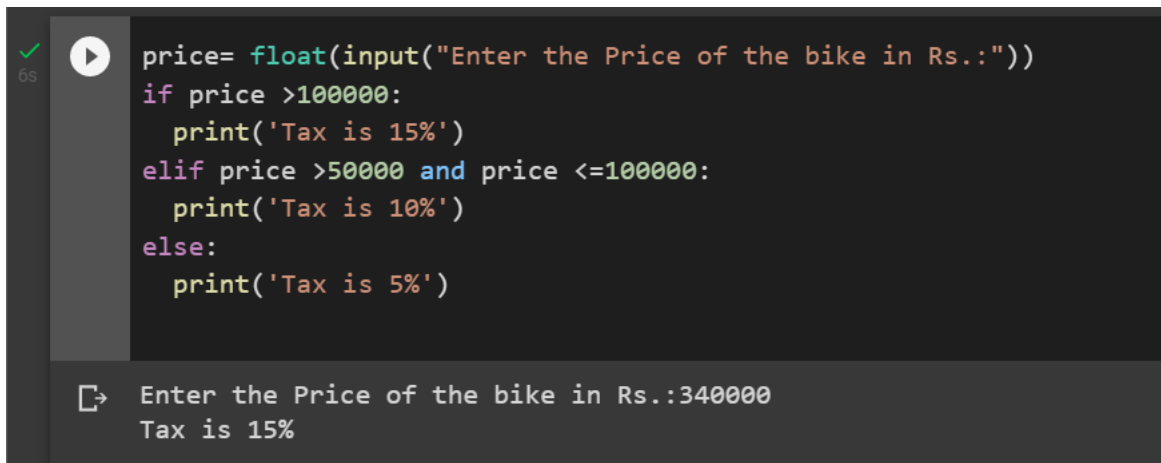
1.

A screenshot of a Python code execution environment. On the left, there is a green checkmark and a play button icon. The code is written in a dark-themed editor. Below the code, there is a terminal window showing the input and output of the program.

```
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.

A screenshot of a Python code execution environment. On the left, there is a green checkmark and a play button icon. The code is written in a dark-themed editor. Below the code, there is a terminal window showing the input and output of the program.

```
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".

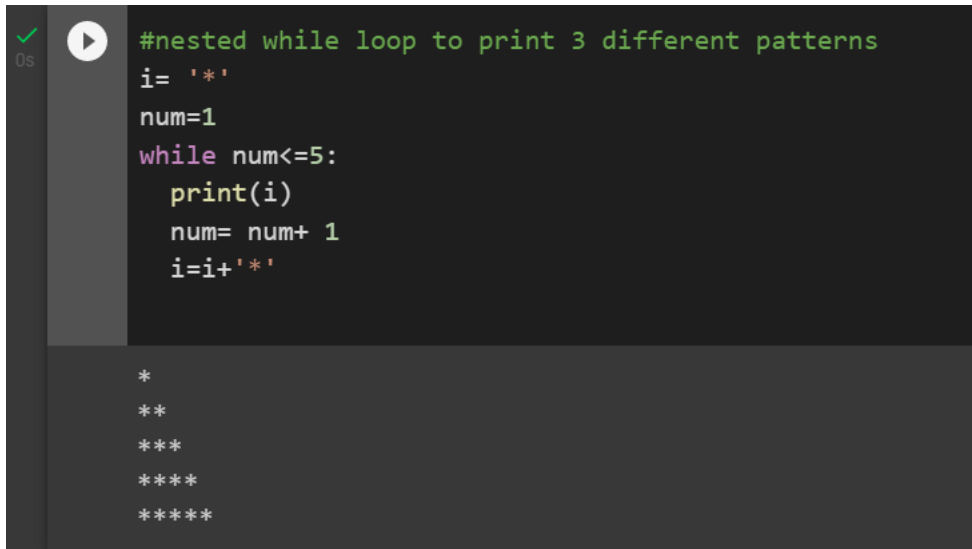
Example:

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

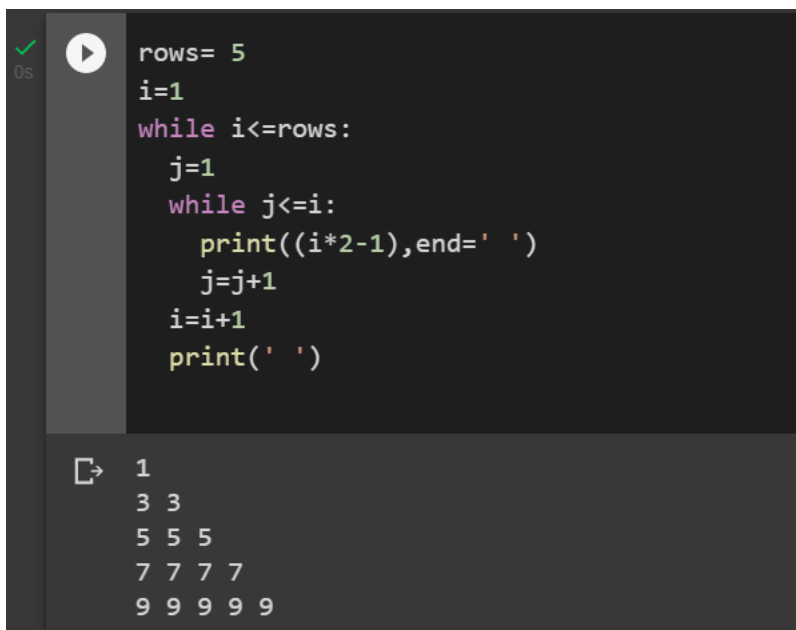
```
ans = 0
```

```
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
```

✓
1s

▶

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

📄

1
8
27
64
125

7.

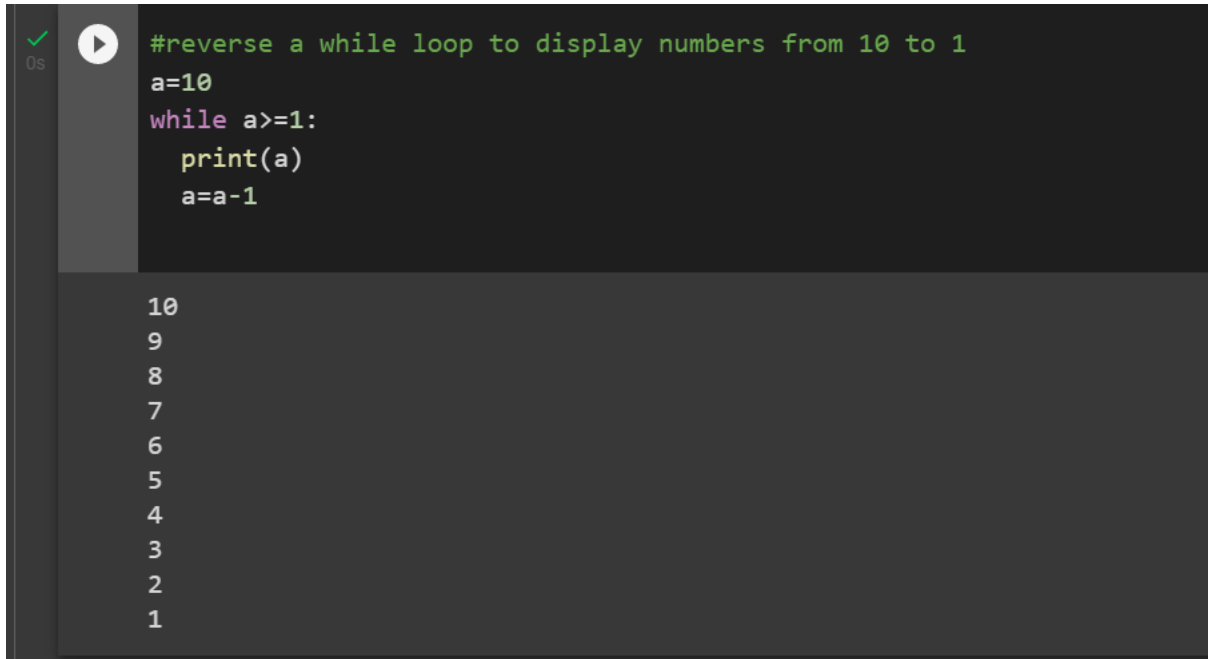
✓
0s

▶

```
#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.



A screenshot of a Python code editor with a dark theme. The editor has a left sidebar with a green checkmark and '0s' indicating execution time, and a play button icon. The main area contains Python code that uses a while loop to print numbers from 10 down to 1. Below the code, the output of the program is displayed as a list of numbers from 10 to 1, each on a new line.

```
#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