

Assignment

Q1.

```
Marks=int(input("Enter Percentage:"))
if Marks>90:
    print("The Grade is A")
elif Marks>80 and Marks<=90:
    print("The Grade is B")
elif Marks>=60 and Marks<=80:
    print("The Grade is C")
else:
    Marks>60
    print("The Grade is D")
```

Q2.

```
Cost=int(input("Enter Cost Price(in Rs)"))
if Cost>100000:
    print("Road Tax to be Pay: {}".format(Cost*0.85))
elif Cost>50000 and Cost<=100000:
    print("Road Tax to be Pay: {}".format(Cost*0.9))
else:
    Cost<=50000
    print("Road Tax to be Pay: {}".format(Cost*0.95))
```

Q3.

```
City=input("Enter the City Name:")
if City=="Delhi":
    print("Red Fort")
elif City=="Agra":
    print("Taj Mahal")
else:
    City=="Jaipur"
    print("Jal Mahal")
```

Q4.

```
n=int(input("Enter Number:"))
for i in range(0,n,3):
    if i<=10:
        print(i)
```

Q5.

In programming, loops are used to repeat a block of code. For example, if we want to show a message 100 times, then we can use a loop.

Python while loop is used to run a block code until a certain condition is met.

The syntax of while loop is:

```
while condition:
    # body of while loop
```

Here,

1. A while loop evaluates the condition
2. If the condition evaluates to True, the code inside the while loop is executed.
3. condition is evaluated again.
4. This process continues until the condition is False.
5. When condition evaluates to False, the loop stops.

Example:

program to display numbers from 1 to 5

```
i = 1
n = 5
while i <= n:
    print(i)
    i = i + 1
```

Q6.

(i) n=7

```
for i in range(0,n):
    for j in range(0,i+1):
        print("* ",end="")
    print("\r")
```

(ii) num_rows = int(input("Enter the number of rows: "))

row = 0

```
while(row < num_rows):
    row += 1
    s = num_rows - row
```

sc = 0

```
while(sc < s):
```

```

        print(" ", end='')
        sc += 1

    stars = 2*row-1
    while(stars > 0):
        print("*", end='')
        stars -= 1

    print()

(iii) num_rows = int(input("Enter the number of rows: "))
row = 0
while(row < num_rows):
    row += 1
    s = num_rows - row

    sc = 0
    while(sc < s):
        print(" ", end='')
        sc += 1

    percentage = 2*row-1
    while(percentage > 0):
        print("%", end='')
        percentage -= 1

    print()

```

Q7.

```

i = 10
while i > 0:
    print(i)
    i = i - 1

```