Assignment 30th Jan AMITOJ SINGH

Write a program to accept percentage from user and display the grade according to given criteria

In [2]:
```
a=int(input("Enter the percentage you got:"))
if a>90:
    print("A")
elif a>80 and a<=90:
    print("B")
elif a>=60 and a<=80:
    print("C")
else:
    print("D")
```

```
Enter the percentage you got:75
C
```

Q2

In [12]:
```
i = float(input("Enter the cost price of the bike:"))
if i>100000:
    print("Your tax will be:",(0.15*i))
elif i>50000 and i<=100000:
    print("Your tax will be:",(0.1*i))
elif i<=50000:
    print("Your tax will be:",(0.05*i))
```

```
Enter the cost price of the bike:25000
Your tax will be: 1250.0
```

Q3

In [4]:
```
Mycity_place = {"Delhi" : "Redfort","Agra" : "Taj Mahal","Jaipur" : "Jal Mahal
a=input("Enter the city :")
b=Mycity_place.get(a)
print("You can visit "+b)
```

```
Enter the city :Agra
You can visit Taj Mahal
```

Q4

In [1]:
```
num = int(input("Enter a number: "))
i = 0

while num > 10:
    num = num / 3
    i += 1


print( i, "times before it is less than or equal to 10.")
```

```
Enter a number: 56
2 times before it is less than or equal to 10.
```

Q5

In python while loop is a control flow statement that allows code to be executed repeatedly while a certain condition is true. The loop will continue executing the code inside the loop as long as the condition remains true.Once the condition inside it becomes false the loop terminates and program continues. While loops are useful in many situations where you need to repeat a block of code multiple times until a certain condition is met. Here are a few examples of when you might use a while loop in Python: 1.Repeating code until a user provides valid input: You might use a while loop to repeatedly prompt the user for input until they provide a valid input that meets certain criteria. 2.Iterating over a list or other iterable until a certain condition is met: You might use a while loop to iterate over a list or other iterable until a certain condition is met, such as finding the first item in the list that meets a certain criterion.

Q6

In [2]:
```
i=1
while i<=5:
    j=1
    while j<=i:
        print(j,end=" ")
        j +=1

    print(" ")
    i+=1
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

In [3]:
```
n = 5
i = 1
while i <= n:
    # print spaces before asterisks
    j = 1
    while j <= n-i:
        print(' ', end='')
        j += 1

    # print asterisks
    j = 1
    while j <= (2*i-1):
        print('*', end='')
        j += 1

    # go to the next line
    print('')
    i += 1
```

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

Q7

In [2]:
```
i=10
while i in range(1,11):
    print(i)
    i-=1
```

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