```
''' 1) Write a program to accept percentage from the user and display the grade according to the following criteria:
>90 A
>80 and <=90 B
>=60 and <=80 C
below 60 D'''
```

```
' Write a program to accept percentage from the user and display the grade according to the following criteria:\n>90 A \n>80 and
<=90 B \n>=60 and <=80 C\nbelow 60 D'
```

```python
percentage=int(input("Enter the percentage"))
if percentage > 90:
    print("Grade : A")
elif percentage>80 and percentage<=90:
    print("Grade : B")
elif percentage>=60 and percentage<=80:
    print("Grade : C")
else:
    print("Grade : D")
```

```
Enter the percentage 95
Grade : A
```

```
''' 2) Write a program to accept the cost price of a bike and display the road tax to be paid according to the following criteria:
Tax                    cost price
15%                      >100000
10%                      >50000 and<= 100000
5%                       <=50000
'''
```

```python
bike_price=int(input("Enter the price"))
if bike_price>100000:
    print("Tax to be paid :15%")
elif bike_price>50000 and bike_price<=100000:
    print("Tax to be paid :10%")
else:
    print("Tax to be paid :5%")
```

```
Enter the price 75000
Tax to be paid :10%
```

```
'''3) Accept any city from the user and display monuments of that city.
Delhi    Redfort
Agra     Taj Mahal
Jaipur   Jai Mahal'''
```

```python
city=input("Enter any city from the given list - \n(Delhi, Agra, Jaipur)\n")
if city=="Delhi":
    print("Red fort")
elif city=="Agra":
    print("Taj Mahal")
else:
    print("JaiMahal")
```

```
Enter any city from the given list -
(Delhi, Agra, Jaipur)
 Agra
Taj Mahal
```

```
#4) Check how many times a given number can be divided  by 3 before it is less than or equal to 10
```

```python
num=int(input())
ans=num/3
if ans<=10:
    print(ans)
else:
    print("The given number can be divided by 3 more than 10 times")
```

```
24
8.0
```

```
#5) Why and when to use while loop in python give a detailed description with example
```

```
##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 cond
#Example: Displaying numbers from 1 to 5
i=0
n=5
while i<n:
    i+=1
    print(i)
```

```
    1
    2
    3
    4
    5
```

```
#6)Use nested while loop to print 3 different pattern
```

```
# pattern 1
i=1
while i<=5:
    j=1
    while j<=i:
        print("*",end=" ")
        j+=1
    print()
    i+=1
```

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

```
#pattern 2
i=1
while i<=5:
    j=5
    while j>=i:
        print("*",end=" ")
        j-=1
    print()
    i+=1

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

```
#pattern 3
n=5
i=1
while i<=n:
    j=5
    while j>i:
        print(" ",end=" ")
        j-=1
    print("* "*i)
    i+=1
```

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

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

```
    10
    9
    8
    7
    6
```

```
5
4
3
2
1
```