

30 Jan Assignment

May 11, 2023

[]: Q1. Write a program to accept the percentage from the user and display the grade according to the following criteria.

[]: ANS -

```
[9]: marks = int(input("enter the marks"))
if marks > 90:
    print("you get grade A")
elif marks >= 80 and marks <= 90:
    print("you get grade B")
elif marks >= 60 and marks <= 80:
    print("you get grade C")
else :
    print("You have failed")
    print("next time workhard")
```

enter the marks 45

You have failed

next time workhard

[]:

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[]: Q2. Write a program to accept the cost price of a bike and display the road tax to be paid according to the following criteria.

[]: ANS -

```
[8]: costprice = int(input("enter the costprice of bike for road tax purpose"))
if costprice > 100000:
    print("you have to pay 15% tax from your costprice")
elif costprice > 50000 and costprice <= 100000:
    print("you have to pay 10% tax from your costprice")
elif costprice <= 50000:
    print("you have to pay 5% tax from your costprice")
```

enter the costprice of bike for road tax purpose 80000

you have to pay 10% tax from your costprice

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[]: Q3. Accept any city from the user and display monuments of that city.

[]: ANS-

```
[3]: # Making a program , city mounments

city = {"Delhi": "Red Fort", "Agra": "Taj Mahal", "Jaipur": "Jal Mahal"}
print(city.keys())

# input city
select = input("select ant city : ").upper()

# create logic
for i in (city.keys()):
    if i[0]==select[0]:
        print(i, " : ", city[i])
    else:
        pass
```

dict_keys(['Delhi', 'Agra', 'Jaipur'])

select ant city : Agra

Agra : Taj Mahal

[]:

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[]: Q4. check how many times a given number can be divided by 3 before it is less
↳ than or equal to 10.

[]: ANS -

```
[1]: number = 100
count = 0
while number > 10:
    number //= 3
    count += 1
print(count)
```

3

```
[ ]:
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```

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[ ]: Q5. why and when to use while loop in python give a detailed description with  
     ↳example.
```

```
[ ]: ANS -
```

```
[ ]: In Python, a while loop is used to execute a block of code repeatedly as long  
     ↳as a certain condition is true. The syntax for a while  
     loop in Python is:
```

```
[2]: i = 0  
     while i < 5:  
         print(i)  
         i += 1
```

0

1

2

3

4

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```

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[ ]: Q6. use nested while loop to print 3 different pattern.
```

```
[ ]: ANS -
```

```
[1]: # 1 . Making square pattern  
  
i=0  
while i<=6:  
    i+=1  
    j=0  
    while j<=6:  
        print("*",end=" ")  
        j+=1  
    print()
```

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

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

[2]: *# 2. Making left triangle pattern*

```
i=0
while i<=5:
    print((i+1)*"*",end=" ")
    i+=1
    print()
```

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

[1]: *# 3. Making right triangle pattern*

```
i=5
while i>=0:
    print("*"*(i))
    i-=1
```

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

[]:

[]:

[]: Q7. Reverse a **while** loop to display number **from** 1 to 10.

[]: ANS -

[12]: **def** PrintReverseOrder(N):

```
    for i in range(N, 0, -1):
        print(i, end = " ");
```

```
if __name__ == '__main__':  
  
    N = 10;  
    PrintReverseOrder(N);
```

10 9 8 7 6 5 4 3 2 1

[]:

[]:

[]: Q8. Reverse a **while** loop to display number **from** 1 to 10

[]: ANS -

```
[3]: def PrintReverseOrder(N):  
  
        for i in range(N, 0, -1):  
            print(i, end = " ");  
  
if __name__ == '__main__':  
  
    N = 10;  
    PrintReverseOrder(N);
```

10 9 8 7 6 5 4 3 2 1

[]: