



Revision

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

Cost price (in Rs) = Tax

- greater than 100000 = 15%
- greater than 50000 and less than or equal to 100000 = 10%
- less than or equal to 50000 = 5%

```
price = int(input("Enter the price of the bike: "))

if price > 100000:
    price15 = (price*15)/100
    print("Total price with tax is ", price15+price)
elif price > 50000 and price <= 100000:
    price10 = (price*10)/100
    print("Total price with tax is ", price10+price)
elif price > 0 and price <= 50000:
    price5 = (price*5)/100
    print("Total price with tax is ", price5+price)
else:
    print("Invalid Price")
```

```
Enter the price of the bike: 75000
Total price with tax is 82500.0
```

2. Write a program to accept a number from 1 to 12 and display name of the month such that month like 1 for January, 11 for November etc.

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

if (num == 1):
    print("January")
elif (num == 2):
    print("February")
elif (num == 3):
    print("March")
elif (num == 4):
    print("April")
elif (num == 5):
    print("May")
elif (num == 6):
    print("June")
elif (num == 7):
    print("July")
elif (num == 8):
    print("August")
elif (num == 9):
    print("September")
elif (num == 10):
    print("October")
elif (num == 11):
    print("November")
elif (num == 12):
    print("December")
else:
    print("Please enter number between 1 to 12!")
```

```
Enter a number: 11
November
```

3. Write a program to check whether a number enter is how many digit number

```
num = input("Enter a number upto 5 digit only! ")
n = len(num)

if n <= 0:
    print("Please enter positive number")
elif n == 1:
    print("One Digit Number")
elif n == 2:
    print("Two Digit Number")
elif n == 3:
    print("Three Digit Number")
```

```

elif n == 4:
    print("Four Digit Number")
elif n == 5:
    print("Five Digit Number")
else:
    print("Please enter number between 1-5 digit!")

```

Enter a number upto 5 digit only! 78762
Five Digit Number

4. Write a program to find the number is even or odd

```

num = int(input("Enter a number: "))

if num % 2 == 0:
    print(num, "is an Even number")
else:
    print(num, "is an Odd number")

```

Enter a number: 770875
770875 is an Odd number

5. Write a program to accept three sides of a triangle to check whether it is an equilateral, isosceles or scalene triangle

```

num1 = int(input("Enter number 1: "))
num2 = int(input("Enter number 2: "))
num3 = int(input("Enter number 3: "))

if (num1 == num2 == num3):
    print("It is an Equilateral Triangle")
elif (num1 != num2 != num3):
    print("It is a Scalene Triangle")
elif (num1==num2 or num2==num3 or num1==num3):
    print("It is an Isosceles Triangle")

```

Enter number 1: 3
Enter number 2: 5
Enter number 3: 5
It is an Isosceles Triangle

6. Write a program that keep on accepting number from the user until user enter zero display sum and average of all the number

```

num = 1
i = -1
total = 0

while num != 0:

```

```

num = int(input("Enter a number: "))
total = total + num
i = i + 1

print("Sum of all number is",total)
print("Average of all number is",total/i)

```

```

Enter a number: 483
Enter a number: 5462
Enter a number: 1521
Enter a number: 2670
Enter a number: 23
Enter a number: 0
Sum of all number is 10159
Average of all number is 2031.8

```

7. Write a program to find the sum of the following (Accept values of a, r, n from user)

$a + ar + ar^2 + ar^3 + + ar^n$

```

a = int(input("Enter a number for a: "))
r = int(input("Enter a number for r: "))
n = int(input("Enter a number for n: "))
s = 0
i = 0
while i < n:
    s = s + a
    a = a * r
    i = i + 1
print(s)

```

```

Enter a number for a: 8
Enter a number for r: 4
Enter a number for n: 7
43688

```

8. Write a program to calculate the sum of all numbers from 1 to a given number

```

num = int(input("Enter a number: "))
s = 0

for i in range(num+1):
    s = s + i
print(s)

```

```
Enter a number: 10
55
```

9. Write a program to display all prime numbers within a range

```
num1 = int(input("Enter a number: "))
num2 = int(input("Enter a number: "))

for i in range(num1,num2+1):
    if i > 1:
        for j in range(2,i):
            if (i % j) == 0:
                break
        else:
            print(i)
```

```
Enter a number: 52
Enter a number: 107
53
59
61
67
71
73
79
83
89
97
101
103
107
```

10. Display Fibonacci series up to 10 terms

```
n = int(input("Enter a number: "))
a = 0
b = 1
result = [0,1]
total = 0
if n < 0:
    print("Invalid Number")
elif n == 0:
    result.pop(1)
    print(a, result)
elif n == 1:
    print(b, result)
else:
    for i in range(1,n):
        total = a + b
        result.append(total)
```

```
    a = b
    b = total
    print(b, result)
```

Enter a number: 10

55 [0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55]