```
##Q1## Program to reverse the string using loops.

str_ = str(input("Enter any string here: "))

rev_str = ""                                        # empty string
created.
length = len(str_)                                  # length of 'str_'
stored in a variable.

while length > 0:
    rev_str += str_[ length - 1 ]                   # adding all the
letters one by one.
    length -= 1                                     # decrementing the
index of 'str_'.
print ("The reversed string is : ",rev_str)
```

```
Enter any string here: Racecar
The reversed string is :  racecaR
```

```
##Q2## Python Program to Print all Numbers in a Range Divisible by a
Given Number.

divisor = int(input("Enter the Divisor here: "))
L = int(input("Enter lower limit of the range: "))
U = int(input("Enter upper limit of the range: "))

for i in range(L , U) :                     # Range set by the user
    if (i % divisor == 0) :                 # Checking the divisibility
        print(i)
```

```
Enter the Divisor here: 7
Enter lower limit of the range: 0
Enter upper limit of the range: 99
0
7
14
21
28
35
42
49
56
63
70
77
84
91
98
```

```
## Q3 ## Program to calculate the area of a triangle using heron's
formula. (check condition if the combination of sides is possible).
```

```
s1 = int(input("Enter Length of first side: "))
s2 = int(input("Enter Length of second side: "))
s3 = int(input("Enter Length of third side: "))
if s1 + s2 > s3 and s2 + s3 > s1 and s1 + s3 > s2 :      # checking if
triangle is possible.

    s = ((s1 + s2 + s3)/2)                               # Semi-
perimeter

    ar = (s*(s-s1)*(s-s2)*(s-s3))**(0.5)                 # Heron's
Formula

print("The area of the triangle is:", round(ar,2))
```

```
Enter Length of first side: 11
Enter Length of second side: 12
Enter Length of third side: 20
The area of the triangle is: 56.72
```

```
## Q4 ## Star Question.

n=5;
for i in range(0,n):                # For Upper Part
    for j in range(0,i):
        print ('*', end=" ")
    print("")

for i in range(n,0,-1):             # For Lower Part
    for j in range(i):
        print('*', end=" ")
    print("")
```

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

```
## Q5 ## Write a python program to print a triangular pattern of the
alphabet (user input the number of rows).
       # Example: Input the number of rows = 5, then the pattern
should come out as given below.
       # If the count of the alphabet gets exhausted, repeat the
alphabet from A.
```

```python
n = int(input("Enter number of rows here: "))
a = 0
for i in range(0,n):
    for j in range(0,i+1):
        alphabet = 65+a
        print(chr(alphabet), end="")
        a += 1
        if alphabet > 89:
            a = 0
            continue
    print()
```

```
Enter number of rows here: 8
A
BC
DEF
GHIJ
KLMNO
PQRSTU
VWXYZAB
CDEFGHIJ
```

```python
## Q6 ## Write a python program to print the prime numbers for a user
input range.

Min_limit = int(input("Enter lower limit of the range here: "))
Max_limit = int(input("Enter upper limit of range here: "))

for i in range(Min_limit, Max_limit):
    if i > 0:
        for j in range(2,i):
            if i%j == 0:
                break
        else:
            print(i)
```

```
Enter lower limit of the range here: 0
Enter upper limit of range here: 19
1
2
3
5
7
11
13
17
```

```python
## Q7 ## Write a python program to find the numbers which are multiple
of 7 and divisible by 11 in the range 1-500.

for i in range(1,500):
```

```
    if i % 77 == 0:          # If a number is divisible by both 7 and
11, it is divisible by 77.
        print(i)
```

```
77
154
231
308
385
462
```

```
## Q8 ## Input 10 integer values from the user. Write a python program
to find and print the following:

Lst = []
print("Enter 10 integer values -->")
for i in range(10):
    Values = int(input())
    Lst.append(Values)
print(Lst)
print()


# a. Print all positive numbers in the entered list.

P_Lst = []
for num in Lst:
    if num > 0:
        P_Lst.append(num)
print("The sublist of positve numbers is", P_Lst)
print()


#b. Print all negative numbers in the entered list.

N_Lst = []
for num in Lst:
    if num < 0:
        N_Lst.append(num)
print("The sublist of negative numbers is", N_Lst)
print()


#c. Print all odd numbers in the entered list.

O_Lst = []
for num in Lst:
    if (num % 2) != 0:
        O_Lst.append(num)
print("The sublist of odd numbers is", O_Lst)
```

```
print()


#d. Print all even numbers in the entered list.

E_Lst = []
for num in Lst:
    if (num % 2) == 0:
        E_Lst.append(num)
print("The sublist of even numbers is", E_Lst)
print()


#e. Print number of times each number occurs in the List.

for num in Lst:
    count = Lst.count(num)
    print(num, 'occurs', count, 'times.')
```

```
Enter 10 integer values -->
1
2
3
4
5
6
-7
-8
-9
0
[1, 2, 3, 4, 5, 6, -7, -8, -9, 0]

The sublist of positve numbers is [1, 2, 3, 4, 5, 6]

The sublist of negative numbers is [-7, -8, -9]

The sublist of odd numbers is [1, 3, 5, -7, -9]

The sublist of even numbers is [2, 4, 6, -8, 0]

1 occurs 1 times.
2 occurs 1 times.
3 occurs 1 times.
4 occurs 1 times.
5 occurs 1 times.
6 occurs 1 times.
-7 occurs 1 times.
-8 occurs 1 times.
```

```
-9 occurs 1 times.
0 occurs 1 times.
```

```
## Q9 ## Write a program to count the number of occurrences of each
word in the list(List entered by the user).

word_list = []
n = int(input("Enter the number of words you want to enter: "))
print()

for i in range(n):
    word = str(input("Enter the word: "))        # List of User input.
    word_list.append(word)
print()

for word in word_list:
    count = word_list.count(word)                # Using count
function to count occurence of each word.
    print(word, "occurs", count, "times.")


Enter the number of words you want to enter: 9

Enter the word: Fuse
Enter the word: conductor
Enter the word: nikaal
Enter the word: diya
Enter the word: hai
Enter the word: Gaindaswami
Enter the word: Fuse
Enter the word: conductor
Enter the word: Hahahahahaha

Fuse occurs 2 times.
conductor occurs 2 times.
nikaal occurs 1 times.
diya occurs 1 times.
hai occurs 1 times.
Gaindaswami occurs 1 times.
Fuse occurs 2 times.
conductor occurs 2 times.
Hahahahahaha occurs 1 times.
```