```python
#Q1

def reverse(s):
    str = ""
    for i in s:
        str = i + str
    return str

s = " Python is interesting."

print(" The original string is : ", end="")
print(s)

print(" The reversed string is : ", end="")
print(reverse(s))
```

```
The original string is :  Python is interesting.
 The reversed string is : .gnitseretni si nohtyP
```

```python
#Q2

lower = int(input(" Enter the lower range limit: "))
upper = int(input(" Enter the upper range limit: "))
n = int(input(" Enter the number to be divided by: "))
for i in range( lower, upper+1):
    if i%n == 0:
        print(i)
```

```
Enter the lower range limit: 3
 Enter the upper range limit: 39
 Enter the number to be divided by: 4
4
8
12
16
20
24
28
32
36
```

```python
#Q3
```

```
import math

def main():
    print()
    print(" Triangle Area Program")
    print()
a,b,c = eval(input(" Enter three lengths seperated by commas: "))
print()

s = (a+b+c)/ 2.0
area = (s*(s-a)*(s-b)*(s-c))**1/2

if a > b:
    a,b = b,a
if a > c:
    a,c = c,a
if b > c:
    b,c = c,b
    print(area)
else:
    a+b > c

    print(" A triangle cannot be formed.")

main()

Case1:
Enter three lengths seperated by commas: 4,5,6

 A triangle cannot be formed.

Case2:
Enter three lengths seperated by commas: 8,5,2

-25.78125

 Triangle Area Program
```

```
#Q4

n = 5;
for i in range(n):
    for j in range(i):
        print('*', end="")
    print('')
```

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

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

```
#Q5

rows = int(input("Enter Right Triangle Consecutive Alphabets Rows = "))

print("====The Right Triangle of Consecutive Alphabets Pattern====")
alphabet = 65

for i in range(rows):
    for j in range(i + 1):
        print('%c' %alphabet, end = ' ')
        alphabet = alphabet + 1
    print()
```

```
Enter Right Triangle Consecutive Alphabets Rows = 5
====The Right Triangle of Consecutive Alphabets Pattern====
A
B C
D E F
G H I J
K L M N O
```

```
#Q6

lower_value = int(input ("Please, Enter the Lowest Range Value: "))
upper_value = int(input ("Please, Enter the Upper Range Value: "))

print ("The Prime Numbers in the range are: ")
for number in range (lower_value, upper_value + 1):
    if number > 1:
```

```
        for i in range (2, number):
            if (number % i) == 0:
                break
        else:
            print (number)

Please, Enter the Lowest Range Value: 0
Please, Enter the Upper Range Value: 100
The Prime Numbers in the range are:
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
```

```
#Q7

nl=[]
for x in range(1,500):
    if (x%7==0) and (x%11==0):
        nl.append(str(x))
print (','.join(nl))

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

```python
#Q8

lst = []
for i in range(0, 10):
    ele = int(input(" Enter the numbers: "))
    lst.append(ele)
pn = []
nn = []
on = []
en = []
for i in range(0, 10):
    if(i>=0):
        pn.append(i)
    if(i<0):
        nn.append(i)
    if(i%2==0):
        on.append(i)
    if(i%2!=0):
        en.append(i)
print(pn)
print(nn)
print(on)
print(en)
def word_count(lst):
    counts = dict()
    for word in lst:
        if word in counts:
            counts[word] += 1
        else:
            counts[word] = 1
    return counts
print( word_count(lst))
```

```
Enter the numbers: 1
 Enter the numbers: 2
 Enter the numbers: 0
 Enter the numbers: 0
 Enter the numbers: 9
 Enter the numbers: 7
 Enter the numbers: 8
 Enter the numbers: 6
 Enter the numbers: 4
 Enter the numbers: 1
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
[]
[0, 2, 4, 6, 8]
[1, 3, 5, 7, 9]
{1: 2, 2: 1, 0: 2, 9: 1, 7: 1, 8: 1, 6: 1, 4: 1}
```

```python
#Q9

def word_count(str):
    counts = dict()
    words = str.split()

    for word in words:
        if word in counts:
            counts[word] += 1
        else:
            counts[word] = 1

    return counts

print( word_count('Python is a case sensitive language.'))
```

```
{'Python': 1, 'is': 1, 'a': 1, 'case': 1, 'sensitive': 1, 'language.': 1}
```