```python
# Q1
def reverse(s):
  str = ""
  for i in s:
    str = i + str
  return str


s = "Geeksforgeeks"

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

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

```

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\python assignments>  & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vs
code\extensions\ms-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '50987' '--' 'c:\Users\admin\python assignmen
ts\practice.py'
The original string  is : Geeksforgeeks
The reversed string(using loops) is : skeegrofskeeG
PS C:\Users\admin\python assignments>
```

powershell
Python Deb...
Python Deb...

```python
# Q2
lower=int(input("Enter lower range limit:"))
upper=int(input("Enter upper range limit:"))
n=int(input("Enter the number to be divided by:"))
for i in range(lower,upper):
    if(i%n==0):
        print(i)

```

practice.py > ...

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   JUPYTER

Python Debug Console + ∨ ⊡ 🗑 ∧ ✕

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\python assignments> & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51002' '--' 'c:\Users\admin\python assignments\practice.py'
Enter lower range limit:5
Enter upper range limit:50
Enter the number to be divided by:48
48
PS C:\Users\admin\python assignments>

```python
# Q3
a = float(input('Enter first side: '))
b = float(input('Enter second side: '))
c = float(input('Enter third side: '))

# calculate the semi-perimeter
s = (a + b + c) / 2

# calculate the area
area = (s*(s-a)*(s-b)*(s-c)) ** 0.5
print('The area of the triangle is %0.2f' %area)
```

practice.py > ...

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   JUPYTER

Python Debug Console

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\python assignments> & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51016' '--' 'c:\Users\admin\python assignments\practice.py'
Enter first side: 6
Enter second side: 7
Enter third side: 9
The area of the triangle is 20.98
PS C:\Users\admin\python assignments>
```

```python
# Q4
a='*'
for i in range(1,6):
  print(i*a)
for i in range(4,0,-1):
    print(i*a)

```

⚙ Python Debug Console + ∨ ⬜ 🗑 ∧ ✕

```
PS C:\Users\admin\python assignments>  & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51027' '--' 'c:\Users\admin\python assignments\practice.py'
*
**
***
****
*****
****
***
**
*
PS C:\Users\admin\python assignments>
```

```python
# Q5
n = int(input("Enter number of rows:"))
a=0

for i in range (n):
    for j in range(i+1):
        print(chr(65+a), end="")
        a+=1
    print()

```

Python Debug Console

```
Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\python assignments>  & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51039' '--' 'c:\Users\admin\python assignments\practice.py'
Enter number of rows:5
A
BC
DEF
GHIJ
KLMNO
PS C:\Users\admin\python assignments>
```

```python
# Q6
n=int(input("Enter the number till you want to check: "))
primes = []
for i in range (2, n+1):
    for j in range(2, i):
        if i%j == 0:
            break
    else:
        primes.append(i)
print(primes)
```

PS C:\Users\admin\python assignments> & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51049' '--' 'c:\Users\admin\python assignments\practice.py'
Enter the number till you want to check: 250
[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, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149,
 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241]
PS C:\Users\admin\python assignments> ▊

```python
# Q7
nl=[]
for x in range(1,500):
    if (x%7==0) and (x%11==0):
        nl.append(str(x))
print (','.join(nl))
```

```python
practice.py > ...
  1    #Q8
  2    # a,b part
  3    num = float(input("Enter a number: "))
  4    if num > 0:
  5        print("Positive number")
  6    elif num == 0:
  7        print("Zero")
  8    else:
  9        print("Negative number")
 10
 11    # c,d part
 12    num = int(input("Enter a number: "))
 13    if (num % 2) == 0:
 14        print("{0} is Even".format(num))
 15    else:
 16        print("{0} is Odd".format(num))
 17
 18    # e part
 19    arr=[1,4,5,4,3,3,4,5,6,7]
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**   JUPYTER   Python Debug Console

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\admin\python assignments> & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51071' '--' 'c:\Users\admin\python assignments\practice.py'
Enter a number: 57
Positive number
Enter a number: 43
43 is Odd
1: 1
4: 3
5 2
PS C:\Users\admin\python assignments>

```python
# Q9
words = ['hello', 'goodbye', 'howdy', 'hello', 'hello', 'hi', 'bye']

print(f'"hello" appears {words.count("hello")} time(s)')
print(f'"howdy" appears {words.count("howdy")} time(s)')


```

```
PS C:\Users\admin\python assignments>  & 'C:\Users\admin\AppData\Local\Microsoft\WindowsApps\python3.10.exe' 'c:\Users\admin\.vscode\extensions\ms
-python.python-2022.8.0\pythonFiles\lib\python\debugpy\launcher' '51083' '--' 'c:\Users\admin\python assignments\practice.py'
"hello" appears 3 time(s)
"howdy" appears 1 time(s)
PS C:\Users\admin\python assignments>
```