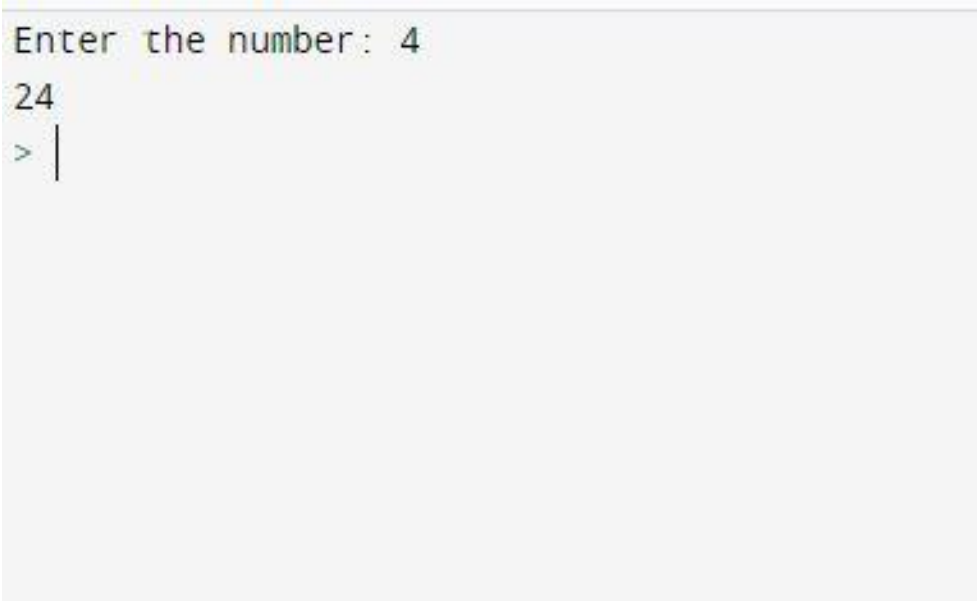
1

```
n=int(input("Enter the number: "))
f=1
while n!=0:
    f=f*n
    n=n-1
print(f)
```

OUTPUT



2.

```
n=int(input("Enter the number of values: "))
n1, n2 = 0, 1
count = 0
if n <= 0:
print("Please enter a positive integer")
elif n == 1:
print("Fibonacci sequence upto",nterms,":")
print(n1)
```

```
else:
print("Fibonacci sequence:")
while count < n:
print(n1)
nth = n1 + n2
    n1 = n2
    n2 = nth
count += 1
```

OUTPUT

```
Enter the number of values: 8
Fibonacci sequence:
0
1
1
2
3
5
8
13
>
```

```
total = 0
list1=[]
l = int(input("Enter the number of elements: "))
forele in range(0,l):
   a=int(input("Enter the elements: "))
list1.append(a)
total = total + list1[ele]
print("Sum of all elements in given list: ", total)
```

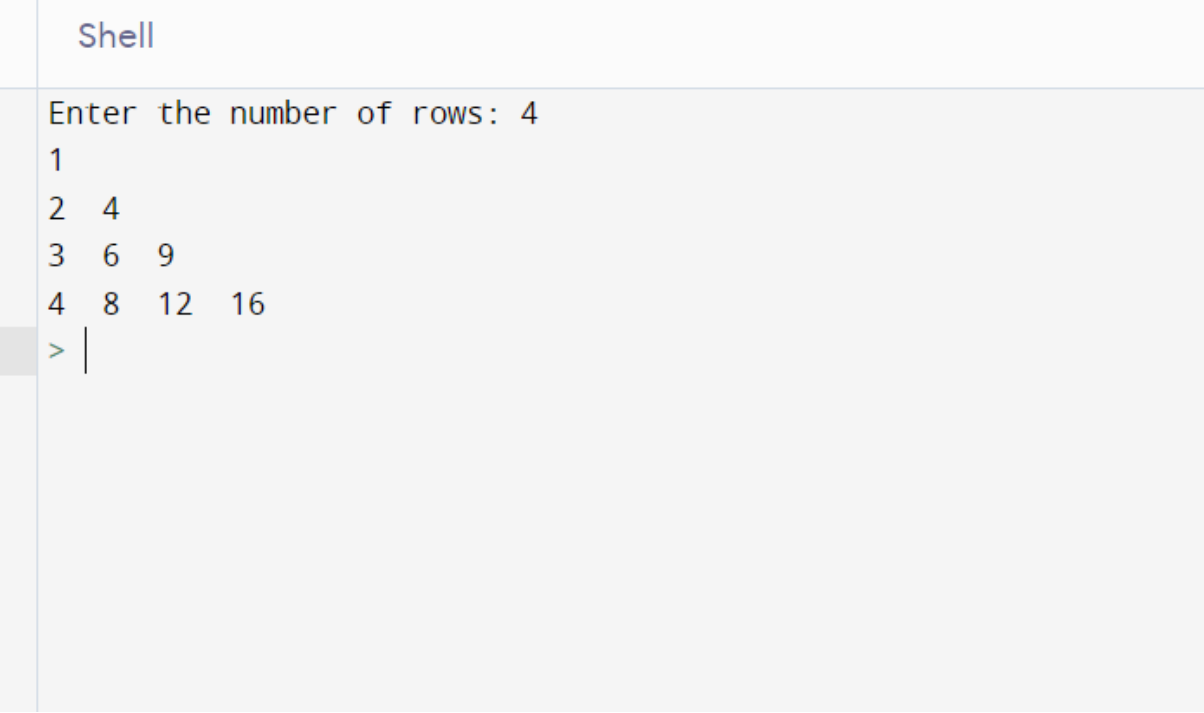
OUTPUT

```
Enter the number of elements: 4
Enter the elements: 4
Enter the elements: 5
Enter the elements: 1
Enter the elements: 2
Sum of all elements in given list:  12
>
```

4

```
N = int(input("Enter the number of rows: "))
for i in range(1,N+1):
   for j in range(1,i+1):
      print(i * j," ", end="")
   print()
```

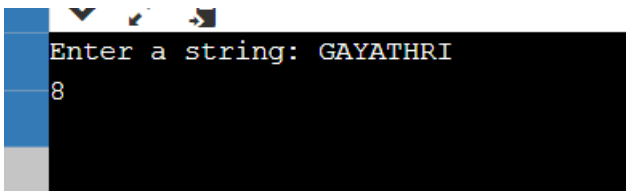
OUTPUT



5

```
word=input("Enter a string: ")
characters=0
for char in word:
    characters+= 1
print(characters)
```

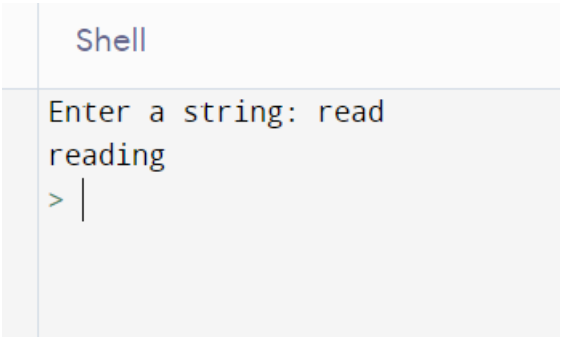
OUTPUT



6

```
def add_string(str1):
  length = len(str1)
  if str1[-3:] == 'ing':
    str1 += 'ly'
  else:
    str1 += 'ing'
  return str1
s=input("Enter a string: ")
print(add_string(s))
```

OUTPUT

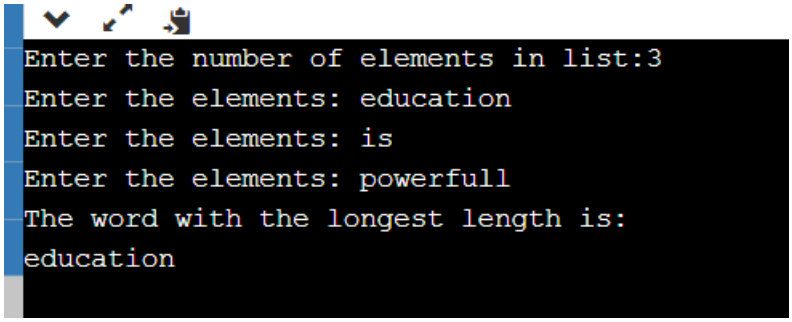


7

```
a=[]
n= int(input("Enter the number of elements in list:"))
for x in range(0,n):
```

```
    a.append(element)
max1=len(a[0])
temp=a[0]
for i in a:
    if(len(i)>max1):
        max1=len(i)
        temp=i
print("The word with the longest length is:")
print(temp)
```

OUTPUT

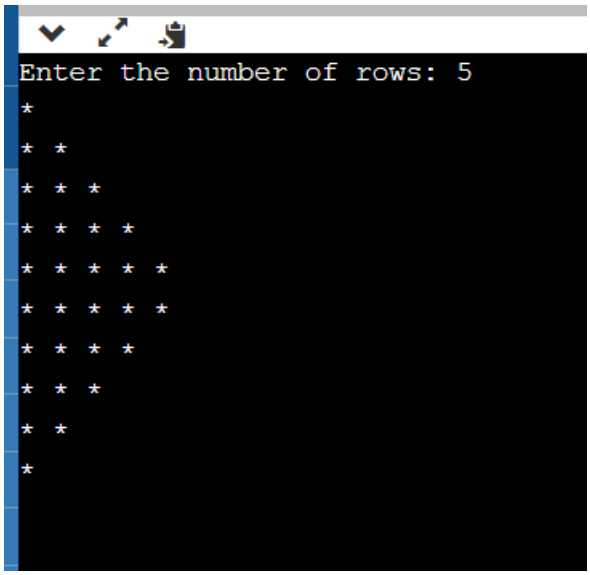


8

```
rows = int(input("Enter the number of rows: "))
for i in range(0, rows):
    for j in range(0, i + 1):
        print("*", end=' ')
    print(" ")
```

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

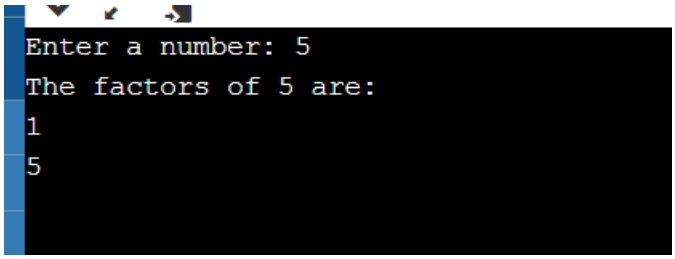
OUTPUT



9

```
def print_factors(x):
   print("The factors of",x,"are:")
   for i in range(1,x+1):
       if x % i == 0:
           print(i)
num = int(input("Enter a number: "))
print_factors(num)
```

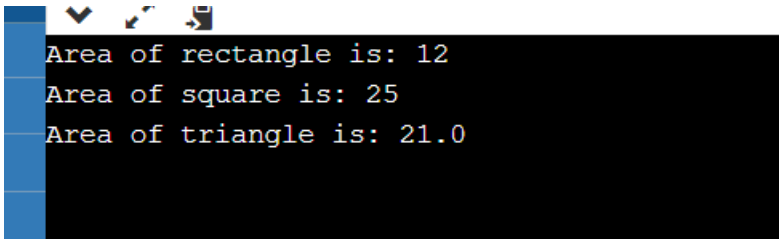
OUTPUT



10

```
area_of_a_rectangle = lambda l,b : l*b

area_of_a_square=lambda a: a*a

area_of_a_triangle=lambda l,b: (1/2)*l*b

print("Area of rectangle is:", area_of_a_rectangle(3,4))

print("Area of square is:", area_of_a_square(5))

print("Area of triangle is:", area_of_a_triangle(6,7))
```

OUTPUT



11

```
n=int(input("Enter the number of elements: "))

list=[]
```

```
for i in range(0,n):
 a=int(input("Enter the numbers: "))
 b=a*a
 if ((b>=1000) and (b<=9999)):
  list.append(b)
print(list)
```

OUTPUT