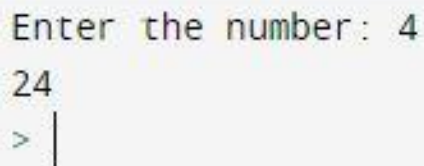


1

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

OUTPUT



```
Enter the number: 4  
24  
> |
```

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: "))
for ele 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

```
Shell
Enter the number of rows: 4
1
2 4
3 6 9
4 8 12 16
> |
```

5

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

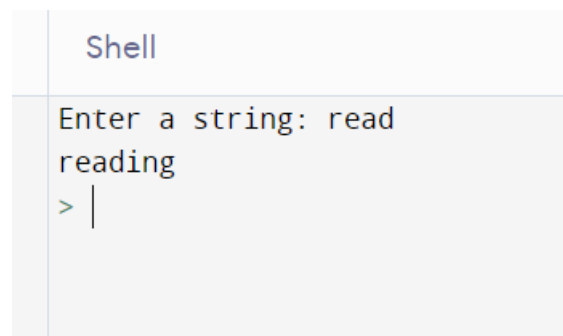
OUTPUT

```
Enter a string: GAYATHRI
8
```

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



```
Shell  
Enter a string: read  
reading  
> |
```

7

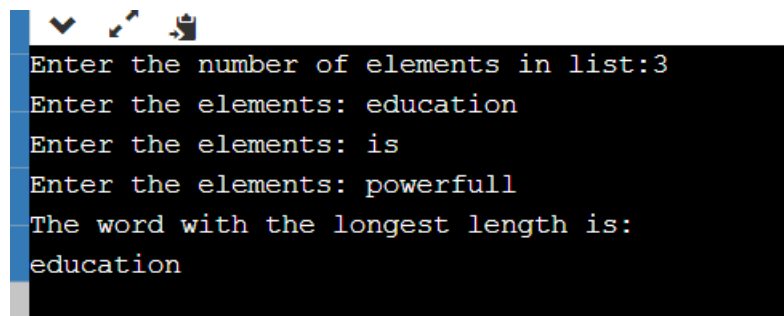
```
a=[]  
n= int(input("Enter the number of elements in list:"))  
for x in range(0,n):
```

```

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



```

Enter the number of elements in list:3
Enter the elements: education
Enter the elements: is
Enter the elements: powerfull
The word with the longest length is:
education

```

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

```

Enter the number of rows: 5
*
* *
* * *
* * * *
* * * * *
* * * * *
* * * * *
* * * *
* * *
* *
*

```

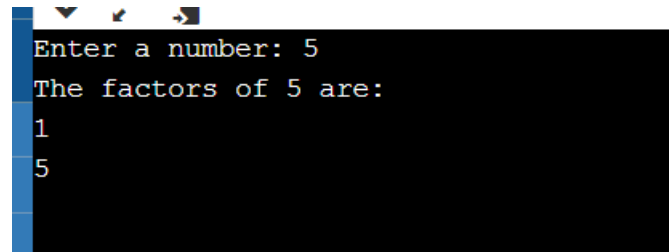
9

```

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

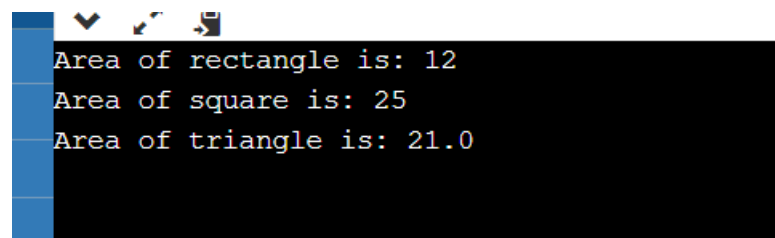
A terminal window with a black background and blue text. It shows the prompt 'Enter a number: 5', followed by 'The factors of 5 are:', and then the factors '1' and '5' on separate lines.

```
Enter a number: 5
The factors of 5 are:
1
5
```

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

A terminal window with a black background and blue text. It shows the output of three print statements: 'Area of rectangle is: 12', 'Area of square is: 25', and 'Area of triangle is: 21.0'.

```
Area of rectangle is: 12
Area of square is: 25
Area of triangle is: 21.0
```

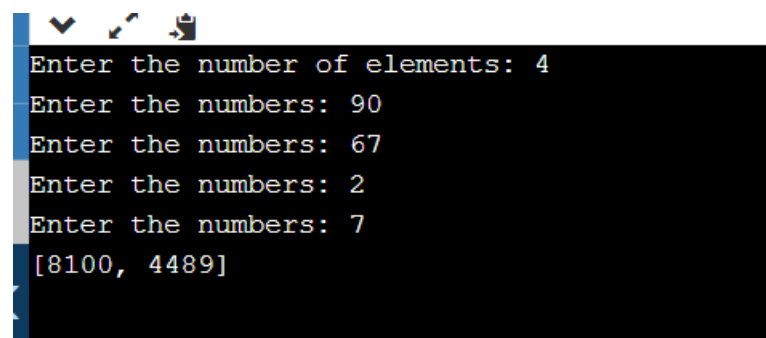
11

```
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

A terminal window with a black background and light blue text. At the top left, there are three small icons: a checkmark, a magnifying glass, and a document. The text in the terminal shows the program's execution: it prompts for the number of elements (4), then for four numbers (90, 67, 2, 7), and finally displays the output list [8100, 4489].

```
Enter the number of elements: 4  
Enter the numbers: 90  
Enter the numbers: 67  
Enter the numbers: 2  
Enter the numbers: 7  
[8100, 4489]
```