In [ ]:
```
1.#Find out: length of string, convert this to list using split operation.
str="Hey iam from New Delhi"
print(len(str))
str.split()
```

```
22
```

Out[ ]:
```
['Hey', 'iam', 'from', 'New', 'Delhi']
```

In [ ]:
```
2.#Given string s = "name is rahul". Write code to give following o/p.
# - "Name is rahul"
# -  "Rame Is Rahul"
# -  "NAME IS RAHUL"
s = "name is rahul"
print(s.capitalize())
str = s.replace("name", "rame")
print(str.title())
print(s.upper())
```

```
Name is rahul
Rame Is Rahul
NAME IS RAHUL
```

In [ ]:
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3.#Using length and breadth as input find out area and perimeter of a given rectangle.
length = int(input("Length: "))
breadth = int(input("Breadth: "))
area = length * breadth
perimeter = 2 * (length + breadth)
print(area)
print(perimeter)
```

```
Length: 6
Breadth: 8
48
28
```

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4.#Using diameter as input find out circumference and area of a circle.
diameter = int(input("Diameter: "))
radius = diameter/2
print("radius: ", radius)
circumference = 22/7 *2*radius
area = (22/7 * radius*radius)
print(circumference)
print(area)
```

```
Diameter: 6
radius:  3.0
18.857142857142858
28.285714285714285
```

In [ ]:
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5.#Write a program to compute roots of a quadratic equation when coefficients a, b and c are known(entered by user).
import cmath
a = float(input("Value of Cofficient a: "))
b = float(input("Value of Cofficient b: "))
c = float(input("Value of Cofficient c: "))
d = (b * b) - (4 * a * c)
r1 = (-b-cmath.sqrt(d))/(2*a)
r2 = (-b+cmath.sqrt(d))/(2*a)
print("root1:",r1)
print("root2:",r2)
```

```
Value of Cofficient a: 5
Value of Cofficient b: 6
Value of Cofficient c: 7
root1: (-0.6-1.0198039027185568j)
root2: (-0.6+1.0198039027185568j)
```

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6.# Find volume of a sphere using radius as input.
radius = float(input("Enter radius: "))
volume = 4 * ((22/7 * (radius * radius * radius))) / 3
print(volume)
```

```
Enter radius: 8
2145.5238095238096
```

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7.#Count the  number of digits in a number. Example: 3454 has 4 digits.
number=int(input("enter number: "))
count=0
while number!=0:
    number=number//10
    count+=1
print(count)
```

```
enter number: 123654789
9
```

In [ ]:
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8.#Write a program that accepts a string and gives output string with all capital letters.
s = input()
print(s.upper())
```

```
output
OUTPUT
```

In [ ]:
```
#Write a program to that accepts a string s, an index number n and a character ‘c’. And outputs the string replaced with the character at the index number n.
 #Example- ‘hello’ , 0 , ‘j’ ==> ‘jello’.
 #(Hint2: You can try it by join function too by typecasting it to list)
string = input("Enter string:")
n = int(input("Enter n:"))
c = input("Enter c:")
string=list(string)
string[n]=c
" ".join(string)
print("the string is:",string);
```

```
Enter string:out
Enter n:2
Enter c:r
the string is: ['o', 'u', 'r']
```

In [ ]:
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10.#Reverse a string. Example: 'Hey there' = 'ereht yeH'
str = input("Enter the string: ")
print(str[::-1])
```

```
Enter the string: hello world
dlrow olleh
```