In [21]:
```
side1=input("Enter side1:")
side2=input("Enter side2:")
identify(side1,side2)
```

executed in 2.63s, finished 16:04:24 2024-08-22

```
Enter side1:10m
Enter side2:10m
10m 10m
Identified shape is Square
Area of square is 100.0 m2
Perimeter of square is 40.0 m
```

2. Inbuilt Functions

- The Functions which are already predefined.
- Examples: len(),type(),append(),split()...etc

In [11]:
```
print(len("string"))
print(len([1,2,3,4]))
print(len((1,2,3,4)))
print(len(range(10)))
print(len((1,2)))
```

executed in 8ms, finished 15:06:10 2024-08-23

```
6
4
4
10
2
```

Writing len() into user defined function.

In [33]:
```
def counting(data):
    count=0
    for i in data:
        count+=1
    return count

def length(data):
    if type(data)==list:
        result=counting(data)
        print(f"Length of list is {result}")
    elif type(data)==tuple:
        result=counting(data)
        print(f"Length of tuple is {result}")
    elif type(data)==str:
        result=counting(data)
        print(f"Length of string is {result}")
    elif type(data)==set:
        result=counting(data)
        print(f"Length of set is {result}")
    elif type(data)==dict:
        result=counting(data)
        print(f"Length of dictionary is {result}")
    else:
        print("It is Not Iterable.")
```

executed in 9ms, finished 15:21:28 2024-08-23

In [34]:
```
length([1,2,3,4])
```

executed in 7ms, finished 15:21:29 2024-08-23

```
Length of list is 4
```

In [35]:
```
length("dhana")
```

executed in 7ms, finished 15:21:32 2024-08-23

```
Length of string is 5
```

In [36]:
```
length((1,2,3,4,5,6))
```

executed in 6ms, finished 15:21:35 2024-08-23

```
Length of tuple is 6
```

In [37]:
```
length({1,2,3,4,5})
```

executed in 5ms, finished 15:21:36 2024-08-23

```
Length of set is 5
```

In [38]:
```
length({1:2,2:3,3:4})
```

executed in 6ms, finished 15:21:38 2024-08-23

```
Length of dictionary is 3
```

In [39]:
```
length(1)
```
executed in 6ms, finished 15:21:40 2024-08-23

```
It is Not Iterable.
```

append()

In [93]:
```
def add_element(l1,val):
    length=0
    for i in l1:
        length+=1
    l1+=[None]

    if type(eval(val))==int:
        l1[length]=int(val)
    elif type(eval(val))==float:
        l1[length]=float(val)
    elif val=="True":
        l1[length]=True
    elif val=="False":
        l1[length]=False
    elif type(eval(val))==complex:
        l1[length]=complex(val)
    else:
        l1[length]=val

    return l1

l1=[1,2,3,4]
print(f"Original List is {l1}")
while True:
    val=input("Enter the value to add in list:")

    if val=="exit" or val=="EXIT" or val=="no" or val=="get out":
        break
    else:
        l1=add_element(l1,val)
print(f"Updated List is {l1}")
```
executed in 5.76s, finished 15:56:15 2024-08-23

```
Original List is [1, 2, 3, 4]
Enter the value to add in list:True
Enter the value to add in list:False
Enter the value to add in list:no
Updated List is [1, 2, 3, 4, True, False]
```

In [ ]:

In [124]:
```
def custom_split(s,seperator=" "):

    result=[]
#     if seperator is None:
#         seperator=" "

    word=""                                                    # word=     "
    for i in s:
        if i==seperator:
            if word:
                result.append(word)
                word=""
        else:
            word+=i

    if word:
        result.append(word)

    print(result)
```

executed in 8ms, finished 16:17:09 2024-08-23

In [127]:
```
s="I am in hyderabad"
custom_split(s)
```

executed in 5ms, finished 16:17:24 2024-08-23

```
['I', 'am', 'in', 'hyderabad']
```

In [ ]: