Double-click (or enter) to edit

Question:Develop a Python script that showcases the basics learned, demonstrating your understanding of Python programming.

Creating Variable

```
Var1 = "Hello 3MTT"
print(Var1)
```

```
Hello 3MTT
```

Double-click (or enter) to edit

Intuition Labelling

```
Male_Participants=28
Female_Participants=22
Total_participants =Male_participants+Female_Participants
print(Total_participants)
```

```
50
```

Strings

```
#Comments
Var2 = 'Coding'
```

```
Var3= 'Coding with Google Colab'
```

```
print(Var2)
```

```
Coding
```

```
print(Var3)
```

```
Coding with Google Colab
```

Using a double quotation when using apostrophe

```
Var4 = "Python's Coding"
```

```
print(Var4)
```

```
Python's Coding
```

Introducing a Method

```
#Printing variable in upper case
Var4 = "Python's Coding"
Var4.upper()
```

```
'PYTHON'S CODING'
```

```
#Writing a code to assign Variable
Fig1=15
Fig2=17
Fig3=Fig1+Fig2
Fig4=Fig1*Fig2
Fig5=Fig1/Fig2
```

```
print(Fig3)
```

```
32
```

```
print(Fig4)
```

```
255
```

```
print(Fig5)
```

```
0.8823529411764706
```

Displaying two different strings

```
#Writing a Variable
First_name='Maryam'
Last_name='Hussain'
Full_name1=First_name+Last_name
Full_name2=(f'{First_name} {Last_name}')
```

Double-click (or enter) to edit

```
print(Full_name1)
```

```
      MaryamHussain
```

```
print(Full_name2)
```

```
      Maryam Hussain
```

Checking the datatype of the variables

```
print(type(Total_participants))
```

```
      <class 'int'>
```

```
print(type(Fig3))
```

```
      <class 'int'>
```

```
print(type(Full_name1))
```

```
      <class 'str'>
```

```
print(type(Full_name2))
```

```
      <class 'str'>
```

LIST

```
#Creating a list


#Initialize a list with a list function
Lst1=list()


Lst1
```

```
      []
```

```
#List with different datatype
Lst2=['string',True,70]


#Accessing a list
#Len function
len(Lst1)
```

```
      0
```

```
len(Lst2)
```

```
3
```

```
Lst2[0]
```

```
'string'
```

```
Lst2[1]
```

```
True
```

```
Lst2[2]
```

```
70
```

```
Lst1[0]
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-49-16b27711de7c> in <cell line: 1>()
----> 1 Lst1[0]

IndexError: list index out of range
```

EXPLAIN ERROR

The above cell gave me an error,because Lst1 has no elements

Modifying Elements in a list

```
#Creating a new List
Lst3=['Aisha','Muhammad','Fatima','Ahmad','Maryam']
```

```
#Adding an element to the list
Lst3[3]='Khadija'
```

```
Lst3
```

```
['Aisha', 'Muhammad', 'Fatima', 'Khadija', 'Maryam']
```

When you add an element in place of another element like i did in the above cell,it takes it's place by removing the initial element

```
#Inserting an element in the list
Lst3.insert(2,'Umar')
```

```
Lst3
```

```
['Aisha', 'Muhammad', 'Umar', 'Fatima', 'Khadija', 'Maryam']
```

```
#Inserting an element using-Append
Lst3.append('Abubakar')
```

```
Lst3
```

```
['Aisha', 'Muhammad', 'Umar', 'Fatima', 'Khadija', 'Maryam', 'Abubakar']
```

In inserting an element like in the above cell,the element is added without removing any of the elements

```
#Removing an element from a list
#Using_Remove
Lst3.remove('Aisha')
```

```
Lst3
```

```
['Muhammad', 'Umar', 'Fatima', 'Khadija', 'Maryam', 'Abubakar']
```

```
#Using pop function
pop_lst=Lst3.pop()
```

```
Lst3
```

```
['Muhammad', 'Umar', 'Fatima', 'Khadija', 'Maryam']
```

```
pop_lst
```

```
'Abubakar'
```