My first program

```
print ("Hello world")
```

```
Hello world
```

```
print ("keshav")
```

```
keshav
```

```
Print ("hello world")
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-3-5c45f1777387> in <cell line: 1>()
----> 1 Print ("hello world")

NameError: name 'Print' is not defined
```

SEARCH STACK OVERFLOW

```
print(keshav)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-4-e6fd86a43413> in <cell line: 1>()
----> 1 print(keshav)

NameError: name 'keshav' is not defined
```

SEARCH STACK OVERFLOW

```
print(1)
```

```
1
```

Variables

```
Name = "keshav"
Age = 18


print (Name)
print (Age)
```

```
keshav
18
```

```
2namelist="keshav","uday"
2namelist
```

```
  File "<ipython-input-15-bf7ccbc56c6a>", line 1
    2namelist="keshav","uday"
    ^
SyntaxError: invalid decimal literal
```

SEARCH STACK OVERFLOW

```
name list="keshav","uday"
name list
```

```
  File "<ipython-input-16-38b2c227c88d>", line 1
    name list="keshav","uday"
         ^
SyntaxError: invalid syntax
```

SEARCH STACK OVERFLOW

```
name+list="keshav","uday"
name+list
```

```
  File "<ipython-input-17-f04a20ce12d7>", line 1
    name_list "keshav" "uday"
```

```
name_list="keshav","uday"
name_list
```

```
('keshav', 'uday')
```

Data types

```
type("ai")
```

```
str
```

```
name='ai'
type(name)
```

```
str
```

```
X=13
type(X)
```

```
int
```

```
X=13.7
type(X)
```

```
float
```

```
Y=True
type(Y)
```

```
bool
```

```
Y=false
type(Y)
```

```
Z="true"
type(Z)
```

```
str
```

List

```
Sample_list=[1,4,9,1.78,"Hello"]
Sample_list
```

```
[1, 4, 9, 1.78, 'Hello']
```

```
type (Sample_list)
```

```
list
```

```
Sample_list[3]
```

```
1.78
```

```
Sample_list[-1]
```

```
'Hello'
```

```
Sample_list[5]
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-31-246aa40bb995> in <cell line: 1>()
----> 1 Sample_list[5]

IndexError: list index out of range
```

SEARCH STACK OVERFLOW

```
Sample_list[0]=100
Sample_list
```

```
[100, 4, 9, 1.78, 'Hello']
```

Tuple

```
Tuple=(1,4,1.7,"hi")
Tuple
```

```
(1, 4, 1.7, 'hi')
```

```
type (Tuple)
```

```
tuple
```

```
Tuple[0]
```

```
1
```

```
Tuple[1]=100
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-38-3912d79774c2> in <cell line: 1>()
----> 1 Tuple[1]=100

TypeError: 'tuple' object does not support item assignment
```

SEARCH STACK OVERFLOW

```
Tuple[6]
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-39-dd5d7af30eec> in <cell line: 1>()
----> 1 Tuple[6]

IndexError: tuple index out of range
```

SEARCH STACK OVERFLOW

Sets

```
Sample_set= {3,8,1,1,1.4,9,12.5,"hi","keshav",99.9}
```

```
Sample_set
```

```
{1, 1.4, 12.5, 3, 8, 9, 99.9, 'hi', 'keshav'}
```

```
Sample_set[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-7-c2379252f2dd> in <cell line: 1>()
----> 1 Sample_set[0]

TypeError: 'set' object is not subscriptable
```

SEARCH STACK OVERFLOW

```
Sample_set[5]=15
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-8-cab2aaf87b8e> in <cell line: 1>()
----> 1 Sample_set[5]=15

TypeError: 'set' object does not support item assignment
```

SEARCH STACK OVERFLOW

```
Sample_set.add(100)
```

```
Sample_set
```

```
{1, 1.4, 100, 12.5, 3, 8, 9, 99.9, 'hi', 'keshav'}
```

```
Sample_set.remove(100)
```

```
Sample_set
```

```
{1, 1.4, 12.5, 3, 8, 9, 99.9, 'hi', 'keshav'}
```

Dictionary

```
dict_1={"name":"uday","age":18}
```

```
dict_1
```

```
{'name': 'uday', 'age': 18}
```

```
dict_1.keys()
```

```
dict_keys(['name', 'age'])
```

```
dict_1.values()
```

```
dict_values(['uday', 18])
```

```
dict_1.update({"hobby":"playing cricket"})
```

```
dict_1
```

```
{'name': 'uday', 'age': 18, 'hobby': 'playing cricket'}
```

```
dict_1['name']="keshav"
```

```
dict_1
```

```
{'name': 'keshav', 'age': 18, 'hobby': 'playing cricket'}
```