

Data Structures, conditional statements and functions in Python.

✓ LIST

```
# Creating a random List
my_random_list = [1, 7, 9, 'Adam', 'Hauwa', 'Nusaiba', 'Bilkis', True]
print(my_random_list)
```

```
[1, 7, 9, 'Adam', 'Hauwa', 'Nusaiba', 'Bilkis', True]
```

```
lst1 = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
lst1
```

```
[10, 20, 30, 40, 50, 60, 70, 80, 90, 100]
```

✓ Tuples

```
# Creating a tuple
Childrens_height_in_meters = (0.3, 0.4, 0.5, 0.7, 0.8, 1)
print(Childrens_height_in_meters)
```

```
(0.3, 0.4, 0.5, 0.7, 0.8, 1)
```

```
# Overriding a tuple
Childrens_height_in_meters = (0.6, 0.8, 1, 1.4, 1.6, 2)
print(Childrens_height_in_meters)
```

```
(0.6, 0.8, 1, 1.4, 1.6, 2)
```

✓ Sets

```
# Creating a set
my_set = {100, 200, 300, 400, 500}
print(my_set)
```

```
{400, 100, 500, 200, 300}
```

```
my_new_set = {100, 100, 200, 200, 300, 300, 400, 400, 500, 500, 600, 600}
print(my_new_set)
```

```
{400, 100, 500, 200, 600, 300}
```

✓ Dictionaries

```
# Creating a dictionary
my_dict = {"Name": "Minal", "Age": 6, "Class": "Basic 1"}
print(my_dict)
```

```
{'Name': 'Minal', 'Age': 6, 'Class': 'Basic 1'}
```

✓ Conditional statements

```
# Creating a statement
age = 18
if age < 18:
    print("Not qualified for level 1")
elif age == 18:
    print("Qualified for level 1")
else:
    print("Consider higher levels")
```

Qualified for level 1

```
age = 17
if age < 18:
    print("Not qualified for level 1")
elif age == 18:
    print("Qualified for level 1")
else:
    print("Consider higher levels")
```

Not qualified for level 1

```
age = 20
if age < 18:
    print("Not qualified for level 1")
elif age == 18:
    print("Qualified for level 1")
else:
    print("Consider higher levels")
```

Consider higher levels

✓ Functions

```
from ast import Name

# Creating a function
def greet(Name):
    print("Hello," + Name)
```

```
# Call a function
greet("Jigawa")
```

Hello,Jigawa

✓ Combining conditional statement and function

```
# Example of coding with function and conditional statement
def check_even_odd(num):
    if num % 2 == 0:
        print(num , "is even")
    else:
        print(num , "is odd")
```

```
# Test the function
check_even_odd(133)
```

133 is odd

```
check_even_odd(90)
```

90 is even

