#### 1. Write a python program to print the following:

Sample string

A string that you don't have to escape

This

Is a ....... multi-line

Here doc string-----> example

### **Solution**

```
message = """
Sample string
A string that you don't have to escape
This
Is a ...... multi-line
Here doc string-----> example
"""
print(message)
```

2. Write a python program to display the date from ex date=(11,6,2022)

Sample output: The exam date will start from : 11 / 6 / 2022

# **Solution**

```
ex_date = (11, 6, 2022)

print("The exam date will start from : %d / %d / %d"

% (ex_date[0], ex_date[1], ex_date[2]))
```

3. Write a python program to display the first and last colors from the following list:

```
Color_list = ["Red", "Green", "White", "Black"] (Hint: use %s format)
```

#### **Solution**

```
Color_list = ["Red", "Green", "White", "Black"]
print("The First Color Is %s And The Last Color Is %s"
%(Color_list[0], Color_list[-1]))
```

4. Write a python program to print out a set containing all the colors from color\_list1 which are not present in color\_list2.

```
Test Data:
Color_list1 = ["Red","White", "Black"]
Color_list2 = ["Red", "Green"] Expected
Output:
{'Black', 'White'}
```

#### Solution

```
Color_list1 = ["Red", "White", "Black"]
Color_list2 = ["Red", "Green"]
print(set(Color_list1)-set(Color_list2))
```

5. Write a python program to input two integers in a single line.

### **Solution**

```
a, b = map(int, input("Enter Two Integers = ").split())
print(a, "\n", b)
```

6. Create a list of two sports. Ask the user what their favorite sport is and add this to the end of the list. Sort the list and display it.

### **Solution**

```
sports = ["Judo", "Boxing"]
sports.append(input("What Is Your Favorite Sport ?"))
print(sports)
sports.sort()
print(sports)
```

7. Create a list of six school subjects. Ask the user which of these subjects they don't like. Delete the subject they have chosen from the list before you display the list again.

#### Solution

8. Ask the user to enter four of their favourite foods and store them in a dictionary so that they are indexed with numbers starting from 1. Display the dictionary in full, showing the index number and the item. Ask them which they want to get rid of and remove it from the list. Sort the remaining data and display the dictionary.

### **Solution**

```
F1 = input("Enter First Of Your Favourite Food : ")
F2 = input("Enter First Of Your Favourite Food : ")
F3 = input("Enter First Of Your Favourite Food : ")
F4 = input("Enter First Of Your Favourite Food : ")
Foods = {1: F1, 2: F2, 3: F3, 4: F4}
print(Foods)
d = int(input("Which Of They You Want To Get Rid Of ? "))
del Foods[d]
data = list(Foods.values())
data.sort()
print(data)
print(Foods)
```

9. Enter a list of ten colours. Ask the user for a starting number between 0 and 4 and an end number between 5 and 9. Display the list for those colours between the start and end numbers the user input.

### **Solution**

```
Colors = ['white', 'black', 'red', 'green', 'blue',
   'yellow', 'orange', 'pink', 'gray', 'gold']
start = int(input('choose starting number between 0 and 4
: '))
end = int(input('choose end number between 5 and 9 : '))
print(Colors[start:end])
```

10. Using the 2D list, ask the user to select a row and a column and display that value.

	0	1	2
0	2	5	8
1	3	7	4
2	1	6	9
3	4	2	0

### **Solution**

```
list = [[2, 5, 8], [3, 7, 4], [1, 6, 9], [4, 2, 0]]
row = int(input('Select a Row : '))
column = int(input('Select a Column : '))
print(list[row][column])
```

11. Using the 2D list from program 10, ask the user which row they would like displayed and display just that row. Ask them to enter a new value and add it to the end of the row and display the row again.

#### **Solution**

```
List = [[2, 5, 8], [3, 7, 4], [1, 6, 9], [4, 2, 0]]
row = int(input('Select a Row : '))
print(List[row])
value = int(input('Enter a New Value : '))
List[row].append(value)
print(List[row])
```

12. Create the following using a 2D dictionary showing the sales each person has made in the different geographical regions:

	N	S	E	W
John	3056	8463	8441	2694
Tom	4832	6786	4737	3612
Anne	5239	4802	5820	1859
Fiona	3904	3645	8821	2451

### **Solution**

```
sales = {
    'John': {'N': 3056, 'S': 8463, 'E': 8441, 'W': 2694},
    'Tom': {'N': 4832, 'S': 6786, 'E': 4737, 'W': 3612},
    'Anne': {'N': 5239, 'S': 4802, 'E': 5820, 'W': 1859},
    'Fiona': {'N': 3904, 'S': 3645, 'E': 8821, 'W': 2451}
    }
print(sales)
```

13. Using program 12, ask the user for a name and a region. Display the relevant data.

Ask the user for the name and region of data they want to change and allow them to make the alteration to the sales figure. Display the sales for all regions for the name they choose.

## **Solution**

```
sales = {
    'John': {'N': 3056, 'S': 8463, 'E': 8441, 'W': 2694},
    'Tom': {'N': 4832, 'S': 6786, 'E': 4737, 'W': 3612},
    'Anne': {'N': 5239, 'S': 4802, 'E': 5820, 'W': 1859},
    'Fiona': {'N': 3904, 'S': 3645, 'E': 8821, 'W': 2451}
    }
```

```
print(sales)

name = input('What Is Your Name ? ')

region = input('What Is Your Region ? ')

print(sales[name][region])

Cname = input('What Is Name Of Data You Want To Change ? ')

Cregion = input('What Is Region Of Data You Want To Change
? ')

data = int(input('New Data : '))

sales[Cname][Cregion] = data

print(sales[Cname])
```