Primitive Data Types

1. **Create a variable x and assign the value 10 to it. Print x .**

```
X = 10
print(x)
```

o/p:
10

2. **Create two variables: a = 5 , b = 3.2 . Print their sum and check the type of each.**

```
a = 5
b = 3.2
print(type(a))
print(type(b))
```

o/p:
<class 'int'>
<class 'float'>

3. **Store your name in a variable my_name and print it.**

```
my_name = sriram
print(my_name)
```

o/p: sriram

4. **Create a variable is_student and assign it the value True . Print the variable and its type.**

```
student = True
print(type(student))
```

o/p: <class 'bool'>

5. **Convert the integer 100 into a string and print the result with its type.**

```
A = 100
b = str(A)
print(type(b))
```

o/p:

<class 'str'>

6. Take a string "45" and convert it into an integer. Add 5 and print the result.

```
a = “45”
A = int(a)
print(type(A))
```

o/p:

<class 'str'>

7. Create a variable temperature and assign a float value. Convert it to integer and print.

```
Temperature = 36.5
Tem = int(Temperture)
print(Tem)
```

o/p:

<class 'int'>

8. Write a program to input your age and print a message like: "You are 25 years old."

```
Age = int(input(“enter your age:- “))
print(f“You are{Age} years old." )
```

o/p:

enter your age:- 88
You are 88 years old.

9. Concatenate two strings: "Hello" and "Python" and print the result.

```
A= “hello”
B = “python”
C= A+B
print(C)
```

o/p:

hellopython

10. Check and print the type of each: 23 , "hello" , 3.14 , True

```
A = 23
B= “hello”
C= 3.14
D= True
print(type(A))
print(type(B))
print(type(C))
print(type(D))
```

o/p:

```
<class 'int'>
<class 'str'>
<class 'float'>
<class 'bool'>
```

Non-Primitive Data Types

(list, tuple, set, dict)

11. Create a list of 5 fruits and print the list.

```
List = [“orange”,”grapes”,”mango”,”banana”,”apple”]

print(List)
```

o/p:

```
['orange', 'grapes', 'mango', 'banana', 'apple']
```

12. Create a tuple of 3 numbers and print the second item.

```
Tuple= (1,2,3)
print( Tuple[1])
```

o/p:

```
2
```

13. Create a list of 5 numbers. Replace the third number with a new value and print the list.

```
List = [1,2,3,4,5]
List[2]= 7
Print(List)

o/p:
[1, 2, 7, 4, 5]
```

14. Create a dictionary with keys: name , age , city . Assign your own values and print the dictionary.

```
Details={
        “Name” : “sriram”,
        “age”:23,
        “city”:“narasapur”
        }
print(Details)

o/p:
{'name': 'sriram', 'age': 23, 'city': 'narasapur'}
```

15. From the above dictionary, print only the value of the city .

```
print(Details[“city”])

o/p :
narasapur
```

16. Add a new key gender to the existing dictionary and print it.

```
Details[“gender”]= “male”
print(Details)

o/p:
{'name': 'sriram', 'age': 23, 'city': 'narasapur', 'gender': 'male'}
```

17. Create a list of numbers and print only the even numbers using a loop.

```
List = [1,2,3,4,5,6,7,8,9,10]
for i in List:
   if i % 2 == 0:
      print(i,"is even")
   else:
      print(i,"is odd")
```

o/p:
1 is odd
2 is even
3 is odd
4 is even
5 is odd
6 is even
7 is odd
8 is even
9 is odd
10 is even

18. Convert a tuple (1, 2, 3) to a list and add a new item to it.

```
tuple =(1, 2, 3)
List=list(tuple)
print(type(List))
List.append(4)
print(List)
```

o/p:
<class 'list'>
[1, 2, 3, 4]

19. Create two sets: {1,2,3} and {3,4,5} . Find and print their intersection.

```
Set1 ={1,2,3}
Set2 = {3,4,5}
Set3 = Set1.intersection(Set2)
print(Set3)
```

o/p:
{3}

20. Create a dictionary of 3 students and their marks. Print e

```
Details={
  "student1":{
    "name":"sriram",
    "marks": 90
```

```
  },
  "student2":{
     "name": "sairam",
     "marks":100
  },
  "student":{
     "name":"ravi",
     "marks":80
  }
}
print(Details)
```

o/p:

{'student1': {'name': 'sriram', 'marks': 90}, 'student2': {'name': 'sairam', 'marks': 100}, 'student': {'name': 'ravi', 'marks': 80}}

Day 2/30 – Python Interview Prep Series

🎯 **Topic: Tricky Output Questions – Logical & Membership Operators**

🔢 **1. 3**

```
print(0 and 1 or 2 and 3)
```

🔢 **2. True**

print(not 0 or not 1)

🔢 **3. True**

print('a' in 'apple' and 'e' in 'tree')

🔢 **4. True**

print('py' in 'python' and 'on' in 'python')

🔢 **5.**

Done

print(5 and [] or "Done")

🔢 **6. True**

print(' ' in 'hello world')

🔢 **7. True**

x = 'a'

print(x in ['A', 'a', 'b'])

🔢 **8. False**

print(not ('' in 'hello'))

🔢 **9.** Python

print(0 or [] or {} or None or "Python")

🔢 **10. False**

print(not True and not False or False)

🔢 **11. False**

print('o' not in 'hello' or 'z' not in 'zebra')

🔢 **12. False**

print("on" in "python" and "py" not in "python")

🔢 **13. True**

x = []

print(x in [[], (), {}])

🔢 **14. False**

print([] == [] and [] is [])

🔢 **15. False**

print('a' in ['apple', 'banana', 'grapes'])

🔷 **Day 2/30 – Python Interview Prep Series**

🎯 **Topic: Tricky Output-Based Questions on Operators**

⚠️ ***No Bitwise Questions Included***

🔢 **1. Op: 16**

print(10 + 3 * 2)

🔢 **2.**

3.3333333333333335

3

print(10 / 3)

print(10 // 3)

🔢 3.

8

x = 5

x += 3

print(x)

🔢 4.

True

False

a = [1, 2, 3]

b = [1, 2, 3]

print(a == b)

print(a is b)

🔢 5.

True

print(True and False or True)

🔢 6.

0

5

x = 0

y = 5

print(x and y)

print(x or y)

🔢 **7.**

True

print(not (True and False))

🔢 **8.**

True

[1,2,3]

x = [1, 2]

y = x

print(x is y)

y.append(3)

print(x)

🔢 **9.**

True

print(5 < 6 > 4)

🔢 **10.**

True

True

```
a = "Python"
b = "Python"
print(a == b)
print(a is b)
```

🔢 **11.**

True

False

```
x = 10
y = 10.0
print(x == y)
print(x is y)
```

🔢 **12.**

False

True

```
a = []
b = []
print(a is b)
print(a == b)
```

🔢 **13.**

105

15

print("10" + "5")

print(int("10") + int("5"))

🔢 **14.**

False

print("True" == True)

🔢 **15.**

0

print(0 or 1 and 0)

Write a function to print statements based on the matched criteria and conditions are youtube video quality selection

```
def youtube():
    quality = int(input("enter your selected quality:- "))
    if quality > 1080:
        print(quality,"HD")
    elif quality < 1080 and quality >= 720:
        print(quality, "medium")
    elif quality < 720 and quality >= 480:
```

```
        print(quality,"average")
    else:
        print(quality,"poor")
youtube()
```

o/p:

enter your selected quality:- 666

666 average

Write a function which needs to call 2 functions inside main function and main function is atm

And

Another 2 functions are withdraw and deposit functions and you can withdraw r deposit after entering crct pin only

```
def bank():
    name = input("Enter your name: ")
    passw = input("Enter your password: ")

    user_name = "Sriram kolla"
    password = "Sriram@1795"
    C_balance = 60000

    if name == user_name and passw == password:
        print("Login successful")

        def withdraw_amount(balance):
```

```
            amount = int(input("Enter the withdrawal amount: "))
            if amount > balance:
                print("Insufficient funds")
                return balance
            else:
                balance -= amount
                print(f"{balance} - Balance after withdrawal")
                return balance

        def deposit_amount(balance):
            amount = int(input("Enter the deposit amount: "))
            balance += amount
            print(f"{balance} - Balance after deposit")
            return balance

        C_balance = withdraw_amount(C_balance)
        C_balance = deposit_amount(C_balance)
        print("Final available balance is", C_balance)

    else:
        print("Invalid username or password")

bank()
```

o/p :-

Enter your name: Sriram kolla

Enter your password: Sriram@1795

Login successful

Enter the withdrawal amount: 699

59301 - Balance after withdrawal

Enter the deposit amount: 333

59634 - Balance after deposit

Final available balance is 59634