ASSIGNMENT -2

Submitted by,
SWETHA B P
(191CS319)

Python code

1)Variables :

```
print("hello world")

name="Jaisri"

print(name) # Jaisri

print("Hello "+name) # Hello Jaisri

name="kiruba"

print("Hello "+name) # Hello kiruba

a = 10
b = 20
c=30.5
print(a+b)

#print(name+b) - Type-Error
#typecast to remove the above error

print(name + str(b)) #kiruba+20 = kiruba20
```

```
print(type(a))
print(type(b))
print(type(c))
print(type(name))

print(type(a+b))
print(a+b)
print(float(a))
```

Output:

```
PS C:\Users\my pc\Documents>  &
gpy\adapter/../..\debugpy\launc
hello world
Jaisri
Hello Jaisri
Hello kiruba
30
kiruba20
<class 'int'>
<class 'int'>
<class 'float'>
<class 'str'>
<class 'int'>
30
10.0
```

2)Array:

```
#lists
names = ["Jaisri","Kiruba","pooja","ponpriya","sumeka"]
print(names)

print(names[1])

names[0]="Jayashree"
print(names)

#tuples
names=("Jaisri","Kiruba","pooja","ponpriya","sumeka")
print(names[0])
#names[0]="Jeevitha" - Does not support
```

```
#set
names={"Jaisri","Kiruba","pooja","ponpriya","sumeka"}
#print(names[0])-not subsriptable

#Mapping data type-dictioneries

# key -> value
# name -> jaisri
# location -> bangalore
# education -> [10,12,B.E]

student1={
    "name":"Jaisri",
    "location" : "Bangalore",
    "Education": [10,12,"b.e"],
    "random_number_picked":6
}
print(student1["location"])
student1["location"]="chennai"
print(student1)
```

Output:

```
PS C:\Users\my pc\Documents>  & 'C:\Users\my pc\AppData\Local\Programs\Python\Python39\python.exe'
gpy\adapter/../..\debugpy\launcher' '56463' '--' 'c:\Users\my pc\Documents\array.py'
['Jaisri', 'Kiruba', 'pooja', 'ponpriya', 'sumeka']
Kiruba
['Jayashree', 'Kiruba', 'pooja', 'ponpriya', 'sumeka']
Jaisri
Bangalore
{'name': 'Jaisri', 'location': 'chennai', 'Education': [10, 12, 'b.e'], 'random_number_picked': 6}
PS C:\Users\my pc\Documents>
```

3) List:

```
random_number = [10,20,30,40,50,60,70]
print(len(random_number))
length_of_array=len(random_number)
print(random_number[length_of_array-1])

print(random_number[2:4])
```

Output:

```
PS C:\Users\my pc\Documents>  & 'C:
gpy\adapter/../..\debugpy\launcher'
7
70
[30, 40]
PS C:\Users\my pc\Documents>
```

4)Data:

```
print("enter your name")
name=input()

print("hello "+name+" glad you are here!")
```

Output:

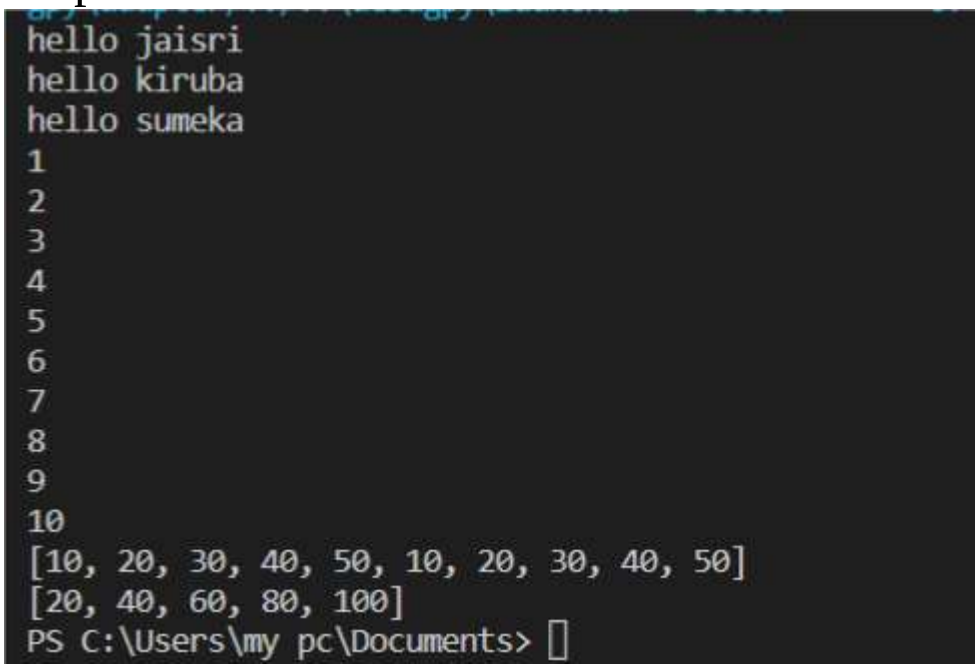
```
PS C:\Users\my pc\Documents>  &
./..\debugpy\launcher' '56605' '
enter your name
Jaisri
hello Jaisri glad you are here!
PS C:\Users\my pc\Documents>
```

5)Loops:

```
names = ["jaisri","kiruba","sumeka"]

for person in names:
    print("hello "+person)

for i in range(1,11):
    print(i)

a=[10,20,30,40,50]
b=[10,20,30,40,50]
print(a+b)

additive=[]
if len(a) == len(b):
```

```
    for x in range(len(a)):
        additive.append(a[x] + b[x])
    print(additive)

else:
    print("the arrays are of different length")
```

Output:



6) Control statement:

```
print("enter a")
a=input()

print("enter b")
b=input()

#a=10
#b=20
```

```
if a>b:
    print("a is grater than b")
    print("by "+str(a-b))
elif b>a:
    print("b is greater than a")
else :
    print("both are same")
```

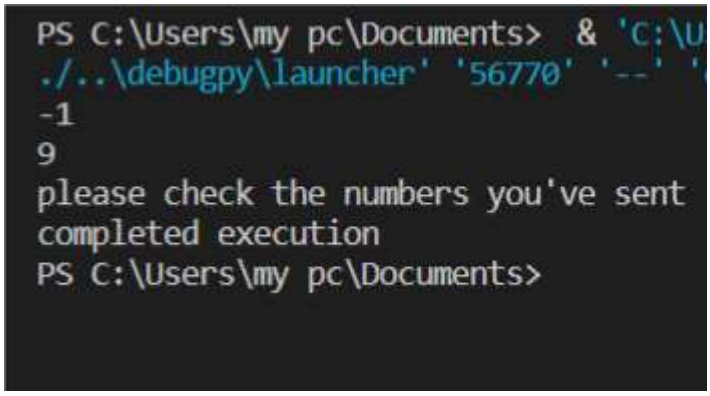
Output:

```
PS C:\Users\my pc\Documents>  &
./..\debugpy\launcher' '56709' '
enter a
100
enter b
100
both are same
PS C:\Users\my pc\Documents>
```

7)Function:

```
def addTwo(x,y):
    return x+y

def substractTwo(x,y):
    return x-y

def divideTwo(x,y):
    response = None
    try:
        response = x/y
    except:
        response="please check the numbers you've sent"
    return response

print(substractTwo(4,5))
print(addTwo(4,5))
print(divideTwo(10,0))
print("completed execution")
```

Output:


PS C:\Users\my pc\Documents> & 'C:\U
./..\debugpy\launcher' '56770' '--' '
-1
9
please check the numbers you've sent
completed execution
PS C:\Users\my pc\Documents>