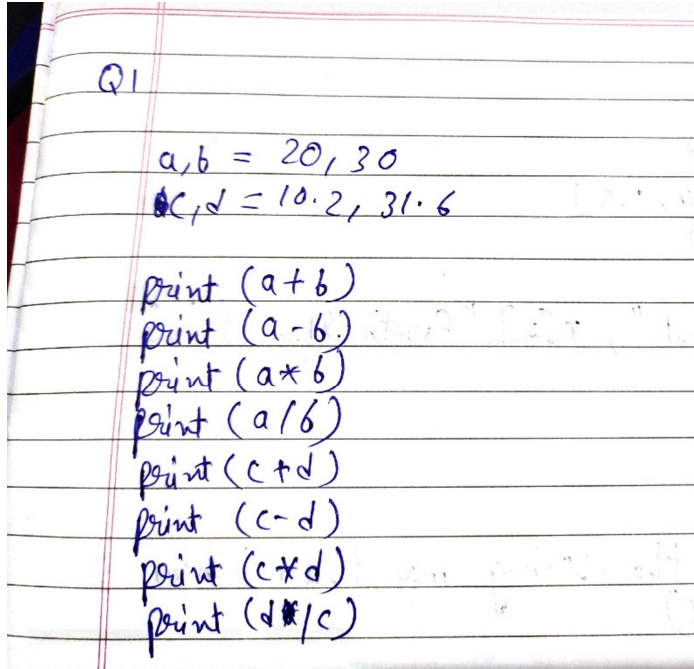


## **Student Information**

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- **Student ID: 590014204**
- **Branch: MCA**
- **Instructor: Abhirup Khanna**
- **Date: 22-07-2024**

### Question 1: Basic Arithmetic Operations

Task: Write a program that performs basic arithmetic operations (addition, subtraction, multiplication, and division) using integers and floats. Print the results.

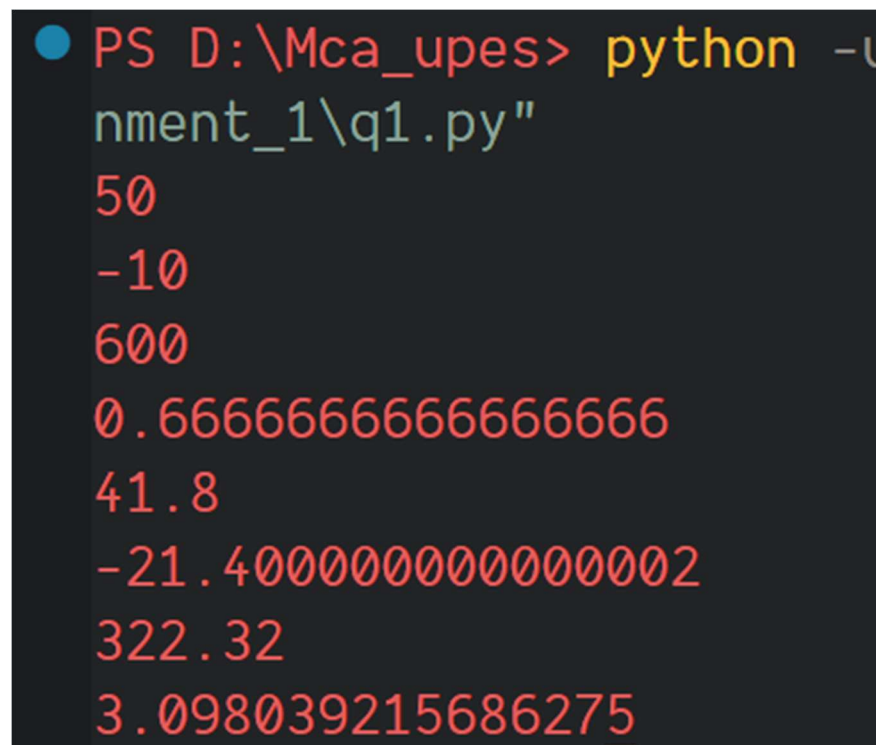


Q1

```
a, b = 20, 30
c, d = 10.2, 31.6

print(a+b)
print(a-b)
print(a*b)
print(a/b)
print(c+d)
print(c-d)
print(c*d)
print(d/c)
```

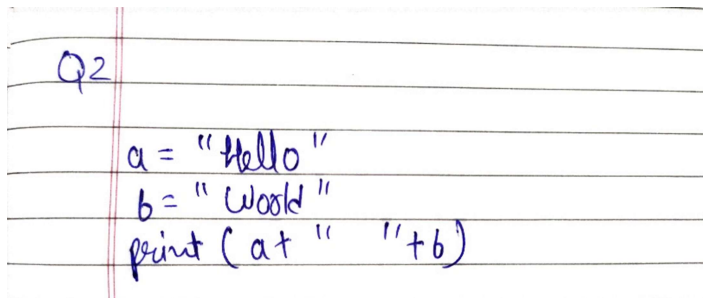
Output:



```
PS D:\Mca_upes> python -u
nment_1\q1.py"
50
-10
600
0.6666666666666666
41.8
-21.400000000000002
322.32
3.098039215686275
```

## Question 2: String Concatenation

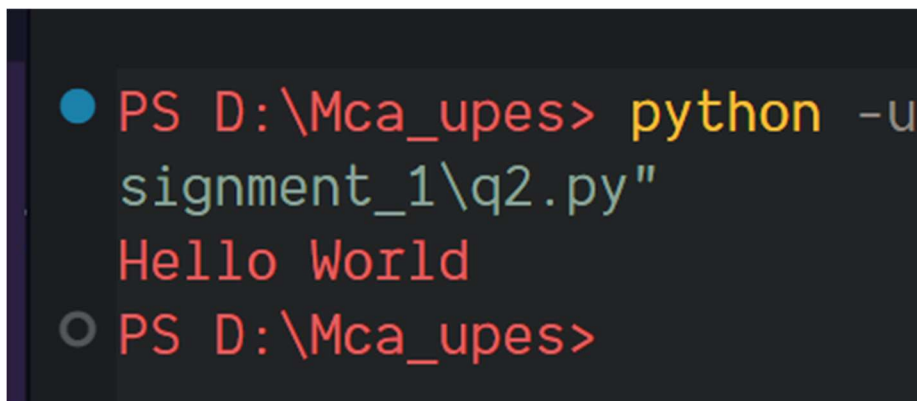
Task: Write a program that takes two strings as input, concatenates them, and prints the result.



Q2

```
a = "Hello"  
b = "World"  
print(a + " " + b)
```

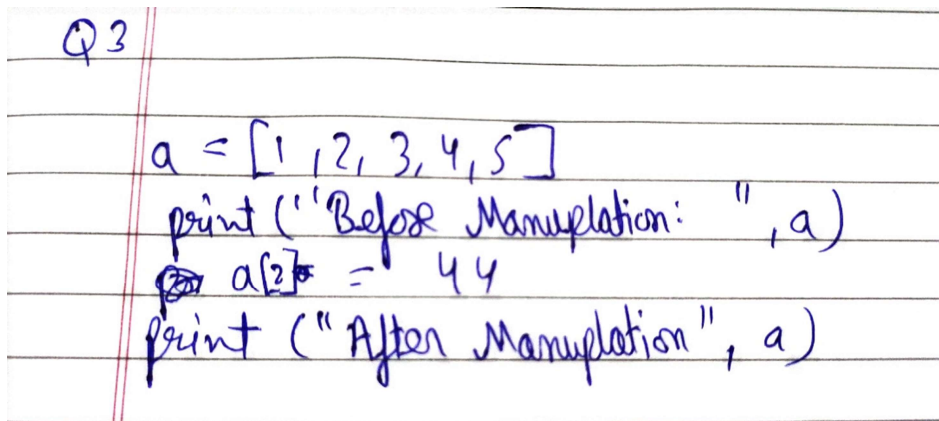
Output:



```
PS D:\Mca_upes> python -u  
segment_1\q2.py"  
Hello World  
PS D:\Mca_upes>
```

### Question 3: List Manipulation

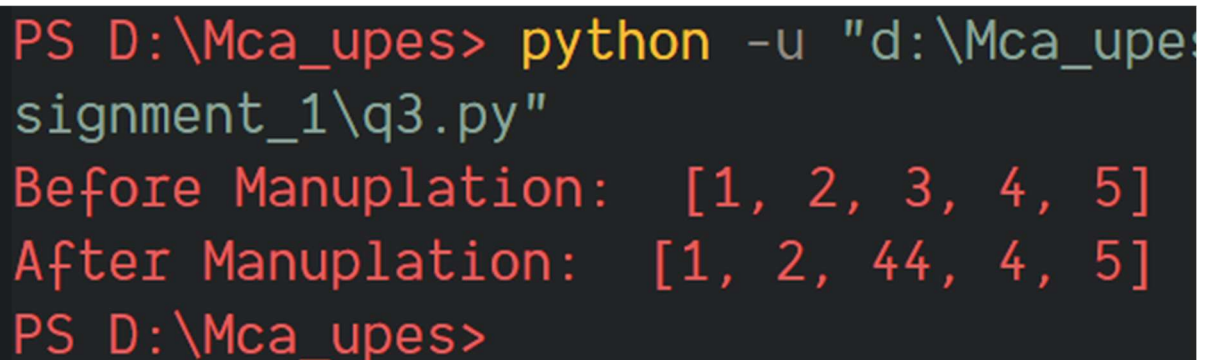
Task: Create a list of five integers. Replace the third element with a new integer and print the updated list.



Handwritten code on lined paper:

```
Q3  
a = [1, 2, 3, 4, 5]  
print('Before Manipulation: ', a)  
a[2] = 44  
print('After Manipulation', a)
```

Output:



```
PS D:\Mca_upes> python -u "d:\Mca_upes  
segment_1\q3.py"  
Before Manipulation: [1, 2, 3, 4, 5]  
After Manipulation: [1, 2, 44, 4, 5]  
PS D:\Mca_upes>
```

#### Question 4: Array Initialization and Access

Task: Initialize an array with five float numbers. Access and print the second and fourth Elements.

Q4

```
import pandas as pd
a=[1.1, 2.2, 3.3, 4.4, 5.5]
x= pd.array(a)
print(x)
print("Second Element", x[1], "Fourth Element:", x[3])
```

Output:

```
python -u "d:\Mca_upes\code
nment_1\q4.py"
<FloatingArray>
[1.1, 2.2, 3.3, 4.4, 5.5]
Length: 5, dtype: Float64
Second Element: 2.2 Fourth Element: 4.4
PS D:\Mca_upes> 
```

### Question 5: String Slicing

Task: Write a program that takes a string input, slices the first five characters, and prints the sliced string.

Q5

```
str = input("Enter the string more than 5 char")  
print(str[:5])
```

Output:

```
PS D:\Mca_upes> python -u "d:\Mca_upes\codes and s  
segment_1\q5.py"  
Enter the string more than 5 char: Ayush Singh  
Ayush  
PS D:\Mca_upes>
```