

Objects and Arrays

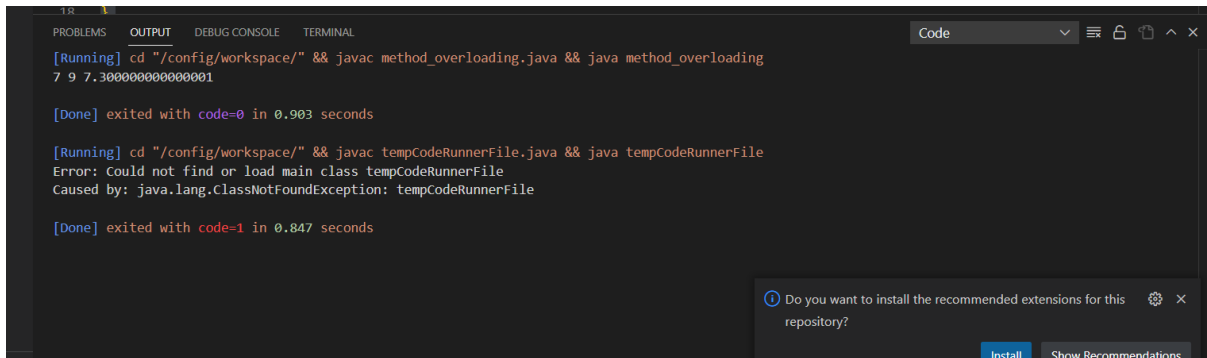
1. Write a program to demonstrate method overloading with 3 different parameters.

Ans:

```
class calc{
    public int add(int n1, int n2)
    {
        int result=n1+n2;
        return result;
    }
    public int add(int n1, int n2,int n3)
    {
        int result=n1+n2+n3;
        return result;
    }
    public double add(double n1, double n2)
    {
        double result= n1 + n2;
        return result;
    }
}
class method_overloading {
    public static void main(String[] args) {
        calc obj=new calc();
        int result=obj.add(4,3);
        int res1=obj.add(4,3,2);
        double res2=obj.add(4.2,3.1);
        System.out.println(result+" "+res1+" "+res2);

    }
}
```

Output:



The screenshot shows a VS Code terminal window with the following output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
[Running] cd "/config/workspace/" && javac method_overloading.java && java method_overloading
7 9 7.300000000000001

[Done] exited with code=0 in 0.903 seconds

[Running] cd "/config/workspace/" && javac tempCodeRunnerFile.java && java tempCodeRunnerFile
Error: Could not find or load main class tempCodeRunnerFile
Caused by: java.lang.ClassNotFoundException: tempCodeRunnerFile

[Done] exited with code=1 in 0.847 seconds
```

A notification at the bottom right asks: "Do you want to install the recommended extensions for this repository?" with buttons for "Install" and "Show Recommendations".

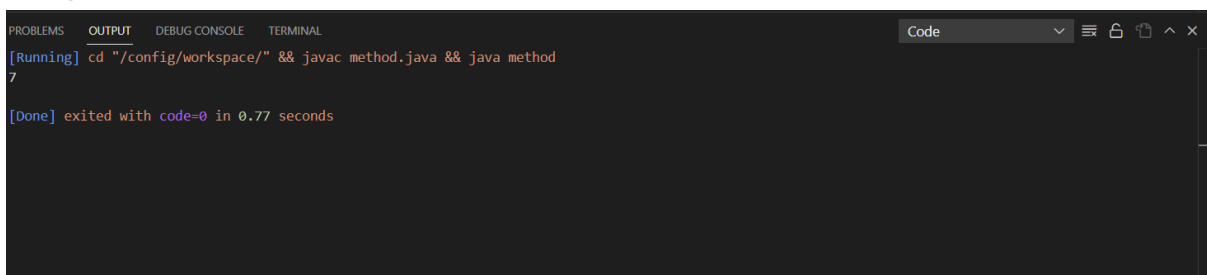
2. Write a program to create an object of an class which contain a method and call that class method in main method

Ans:

```
class Addition{
    public int add (int n1,int n2)
    {
        int result=n1+n2;
        return result;
    }
}

public class method {
    public static void main(String[] args){
        Addition obj = new Addition();
        int result=obj.add(3,4);
        System.out.println(result);
    }
}
```

Output:



The screenshot shows a VS Code terminal window with the following output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
[Running] cd "/config/workspace/" && javac method.java && java method
7

[Done] exited with code=0 in 0.77 seconds
```

3. Write a Java program to calculate the sum of all elements in an integer array?

Ans:

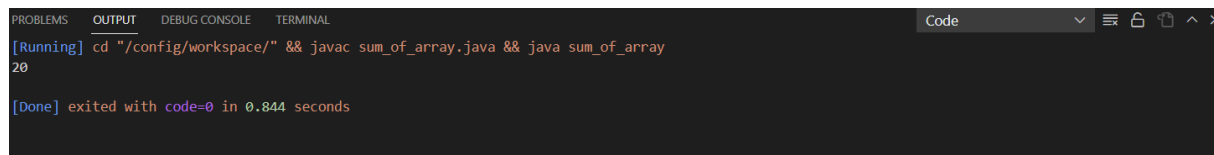
```

    public class sum_of_array {
public static void main (String[] args){
    int arr[] = new int[5];
    arr[0]=1;
    arr[1]=2;
    arr[2]=4;
    arr[3]=5;
    arr[4]=8;
    int sum=0;
    for(int i=0;i<5;i++){
sum+=arr[i];
    }
    System.out.println(sum);

}
}

```

Output:



```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
[Running] cd "/config/workspace/" && javac sum_of_array.java && java sum_of_array
20
[Done] exited with code=0 in 0.844 seconds

```

4. Write a Java program to find the index of a specific element in an integer array?

Ans:

```

public class find_index {
    public static void main (String []args){
        int count=0;
        int arr[] = new int[5];
        arr[0] = 4;
        arr[1] = 5;
        arr[2] = 9;
        arr[3] = 10;
        arr[4] = 12;
        //find index of 5
        for(int i=0;i<5;i++){

```

```

        if(arr[i]==5) {
            System.out.println("Element found at index "+i);
            count=1;
        }
    }
    //if element is not found
    if (count==0)
        System.out.println("Element not found");
}
}

```

Output:

```

14 System.out.println("Element found at index "+i);
PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL
[Running] cd "/config/workspace/" && javac sum_of_array.java && java sum_of_array
20

[Done] exited with code=0 in 0.844 seconds

[Running] cd "/config/workspace/" && javac find_index.java && java find_index
Element found at index 1

[Done] exited with code=0 in 0.873 seconds

```

5. Write a Java program to print an entire array?

Ans:

```

class print_array{
public static void main(String []args){
int arr[] = new int[5];
    arr[0] = 4;
    arr[1] = 5;
    arr[2] = 9;
    arr[3] = 10;
    arr[4] = 12;
for(int i=0;i<5;i++){
    System.out.print(arr[i]+" ");
}
}
}

```

Output:

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL Code

```
[Running] cd "/config/workspace/" && javac print_array.java && java print_array
4 5 9 10 12
[Done] exited with code=0 in 0.838 seconds
```