

## Assignment No 5

1. Write a Java program using Lambda Expression to print "Hello World".
2. Write a Java program using Lambda Expression with single parameters.
3. Write a Java program using Lambda Expression with multiple parameters to add two numbers.
4. Write a Java program using Lambda Expression to calculate the following:
  - a. Convert Fahrenheit to Celsius
  - b. Convert Kilometers to Miles.
5. Write a Java program using Lambda Expression with or without return keyword.
6. Write a Java program using Lambda Expression to concatenate two strings

### Solutions:

1. Write a Java program using Lambda Expression to print "Hello World".

Code:

```
package Lamdaexp;

interface Greetings{

    public void sayHellWorld();

}

public class sayHelloworld {

    public static void main(String[] args) {
```

```

System.out.println("Lambda Expressions Demonstration");

Greetings greet=() -> System.out.println("Hello World Aditya");

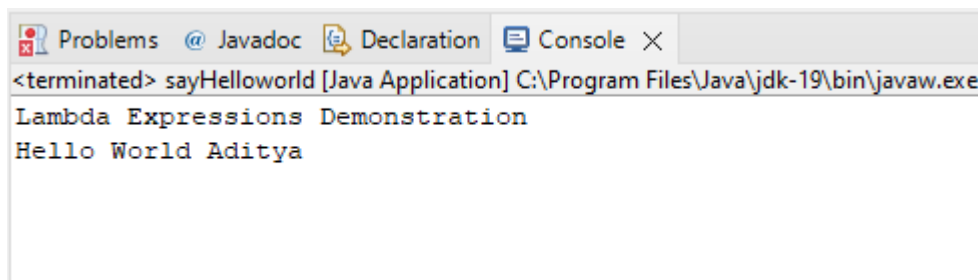
greet.sayHellWorld();

}

}

```

Output:



2. Write a Java program using Lambda Expression with single parameters.

Code:

```

package Lamdaexp;

interface Greetings{

    public void sayHellWorld(String name);

}

public class single {

    public static void main(String[] args) {

        System.out.println("Lambda Expressions Demonstration");

        Greetings greet=(name) -> System.out.println("Hello " +name);

        greet.sayHellWorld("Aditya");

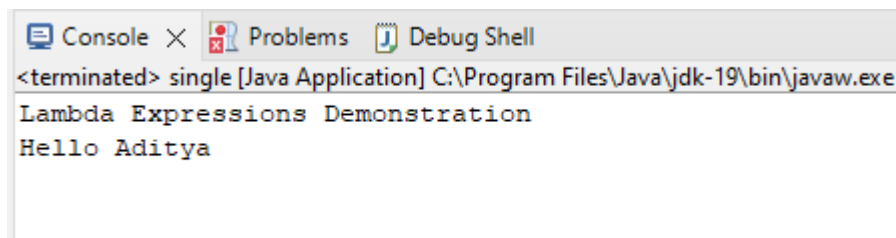
    }

}

```

```
}
```

Output:

A screenshot of an IDE's console window. The window has three tabs: 'Console', 'Problems', and 'Debug Shell'. The 'Console' tab is active, showing the output of a Java application. The text in the console is: '<terminated> single [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe', 'Lambda Expressions Demonstration', and 'Hello Aditya'.

```
<terminated> single [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe
Lambda Expressions Demonstration
Hello Aditya
```

3. Write a Java program using Lambda Expression with multiple parameters to add two numbers.

Code:

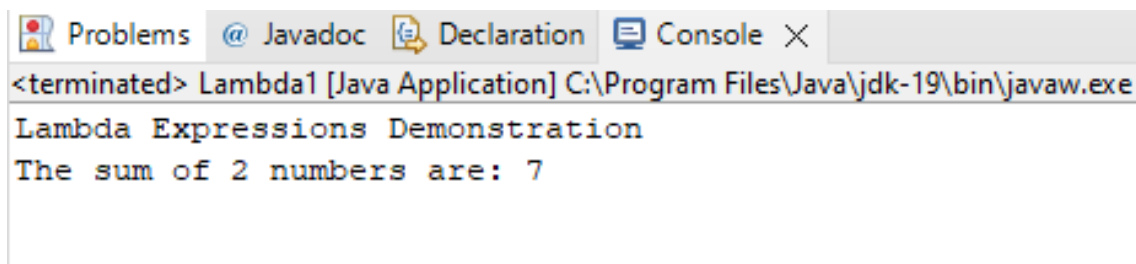
```
package assignment3;
interface Arithmetic{
    public int add(int a, int b);
}
public class Lambda1 {

    public static void main(String[] args) {
        System.out.println("Lambda Expressions Demonstration");
        Arithmetic arth =(a,b) -> a+b;
        System.out.println ("The sum of 2 numbers are: "+
arth.add(4, 3));

    }

}
```

Output:

A screenshot of an IDE's console window. The title bar shows tabs for 'Problems', 'Javadoc', 'Declaration', and 'Console'. The console text reads: '<terminated> Lambda1 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe', 'Lambda Expressions Demonstration', and 'The sum of 2 numbers are: 7'.

4. Write a Java program using Lambda Expression to calculate the following:

- a. Convert Fahrenheit to Celsius
- b. Convert Kilometers to Miles.

Code:

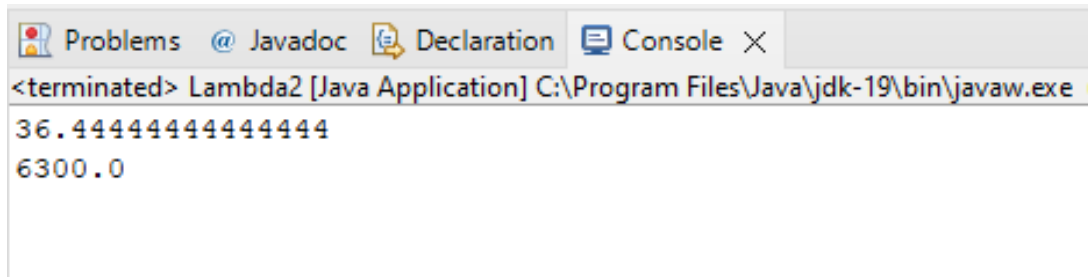
```
package assignment3;
import java.util. *;
interface Temprature{
    public void fahrenheitTocelsius(double fahrenheit);
}
interface Distance{
    public void kilometerstometers(double kilometers);
}
public class Lambda2 {

    public static void main(String[] args) {
        Temprature temp=(fahrenheit) -> System.out.println
((fahrenheit-32)*(5.0/9.0));
        temp.fahrenheitTocelsius(97.6);
        Distance dist = (kilometers) ->
System.out.println(kilometers*1000);
        dist.kilometerstometers(6.3);

    }

}
```

Output:



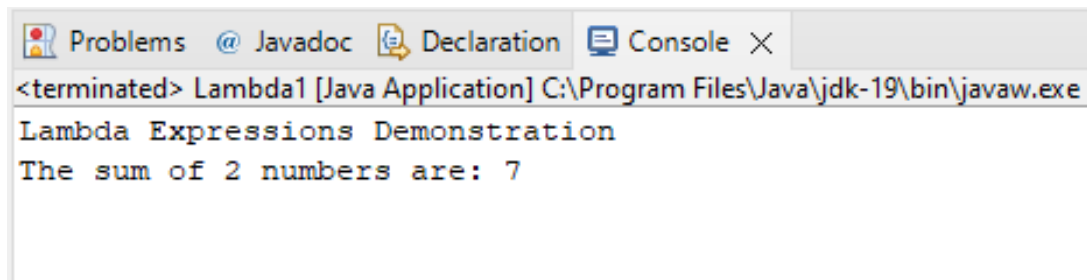
```
<terminated> Lambda2 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  
36.44444444444444  
6300.0
```

5. Write a Java program using Lambda Expression with or without return keyword.

Code:

```
package assignment3;  
interface Arithmetic{  
    public int add(int a, int b);  
}  
public class Lambda1 {  
  
    public static void main(String[] args) {  
        System.out.println("Lambda Expressions Demonstration");  
        Arithmetic arth =(a,b) -> {return(a+b);};  
        System.out.println ("The sum of 2 numbers are: "+  
arth.add(4, 3));  
  
    }  
  
}
```

Output:



```
<terminated> Lambda1 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe
Lambda Expressions Demonstration
The sum of 2 numbers are: 7
```

6. Write a Java program using Lambda Expression to concatenate two strings

Code:

```
package Lamdaexp;

import Lamdaexp.concatination.Buildstring;

public class concatination {

    interface Buildstring{

        public String concatenate(String str1, String str2);

    }

    public static void main(String[] args) {

        Buildstring bstr=(str1, str2)->str1+str2;

        String Full_name=bstr.concatenate(" Aditya", " Pandey");

        System.out.println("After Concatenation"+ Full_name);

    }

}
```

Output:

Console × Problems Debug Shell  
<terminated> concatenation [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (

After Concatenation Aditya Pandey