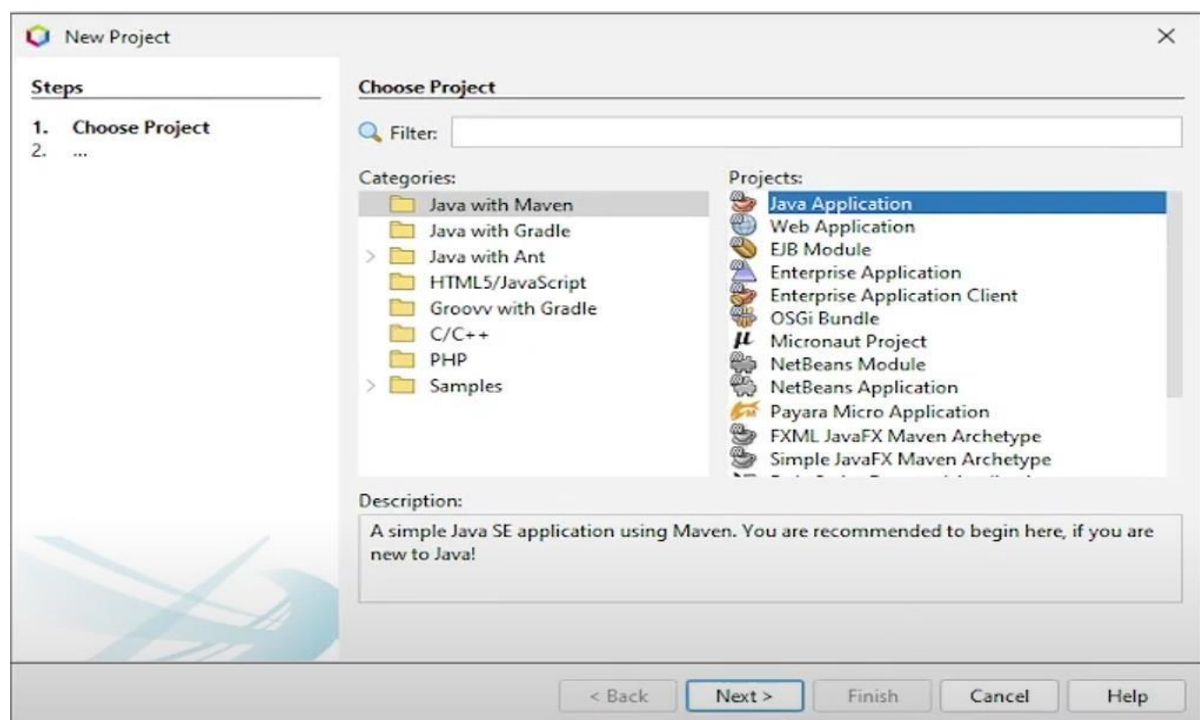
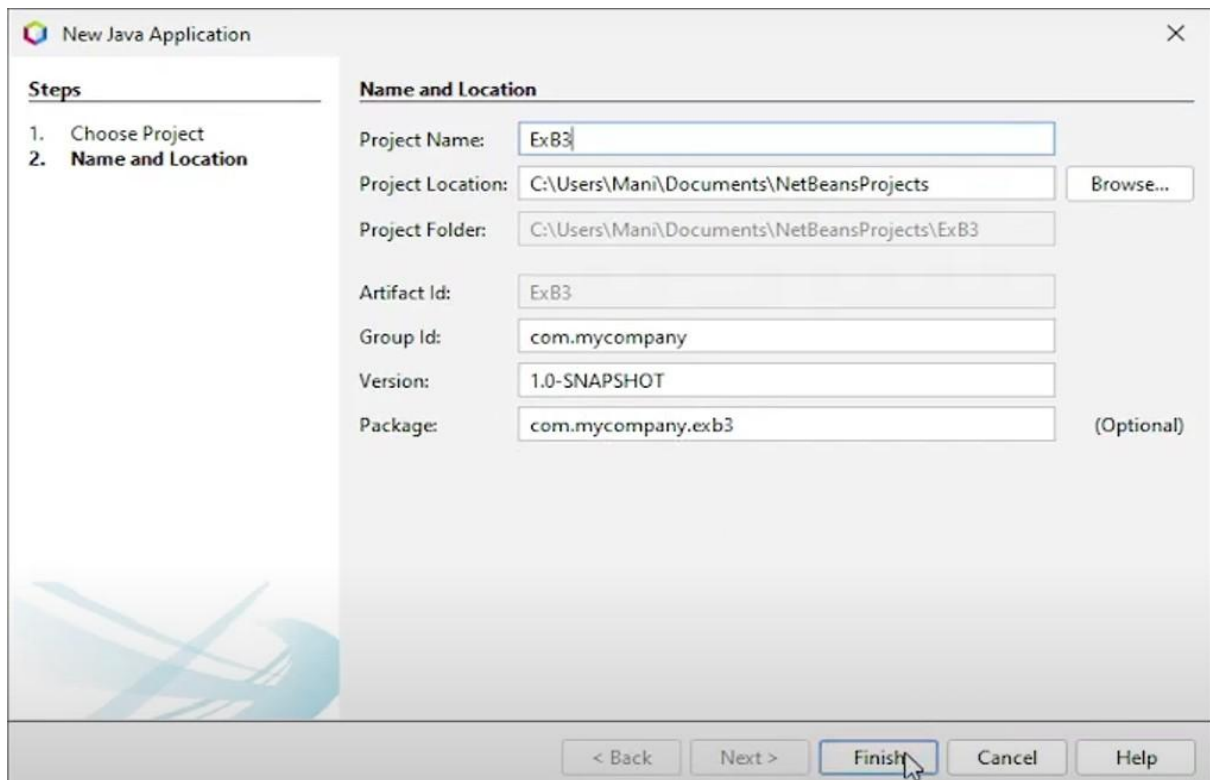


Advanced Java & J2EE -PART B

3)Write a Java class called Tax with methods for calculating Income Tax. Have this class as a servant and create a server program and register in the rmiregistry. Write a client program to invoke these remote methods of the servant and do the calculations. Accept inputs interactively.

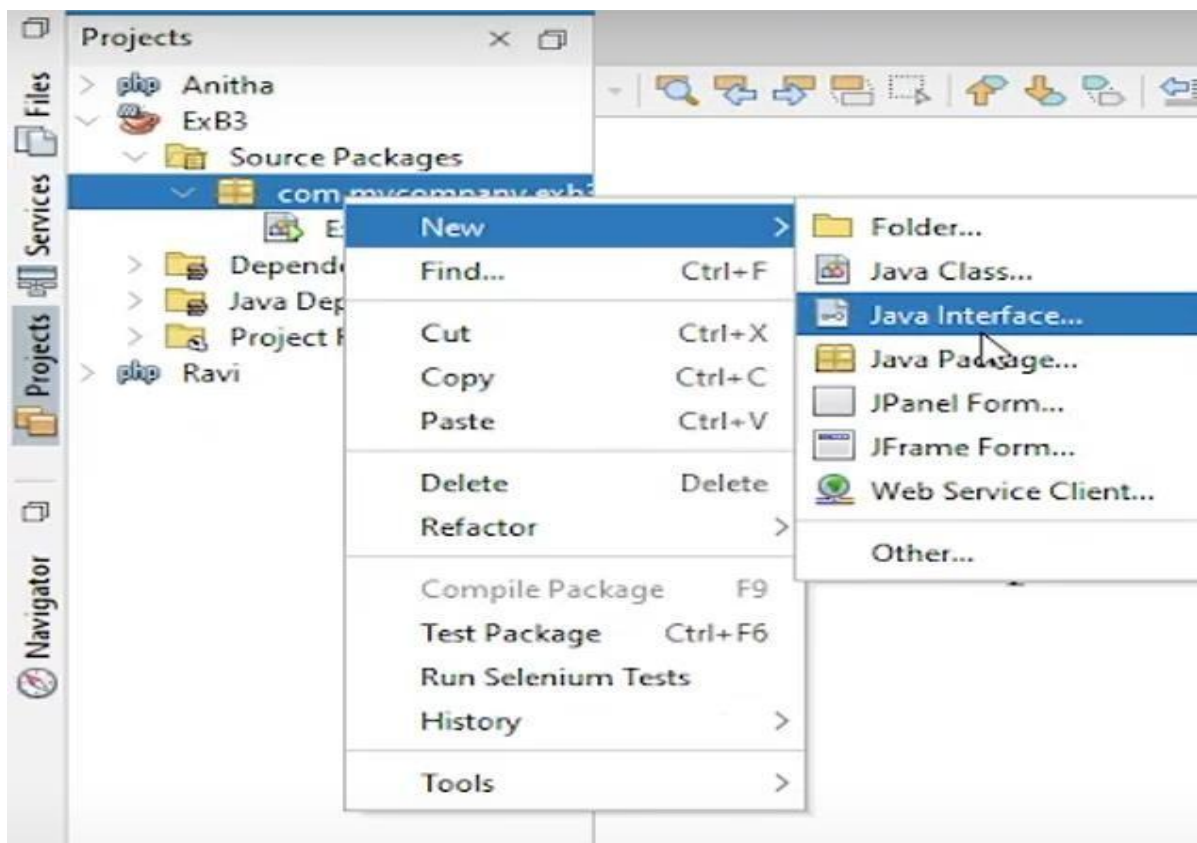
< ₹ 3,00,000	No Tax
₹ 3,00,001 to ₹ 6,00,000	5%
₹ 6,00,001 to ₹ 9,00,000	10%
₹ 9,00,001 to ₹ 12,00,000	15%
₹ 12,00,001 to ₹ 15,00,000	20%
> ₹ 15,00,000	30%

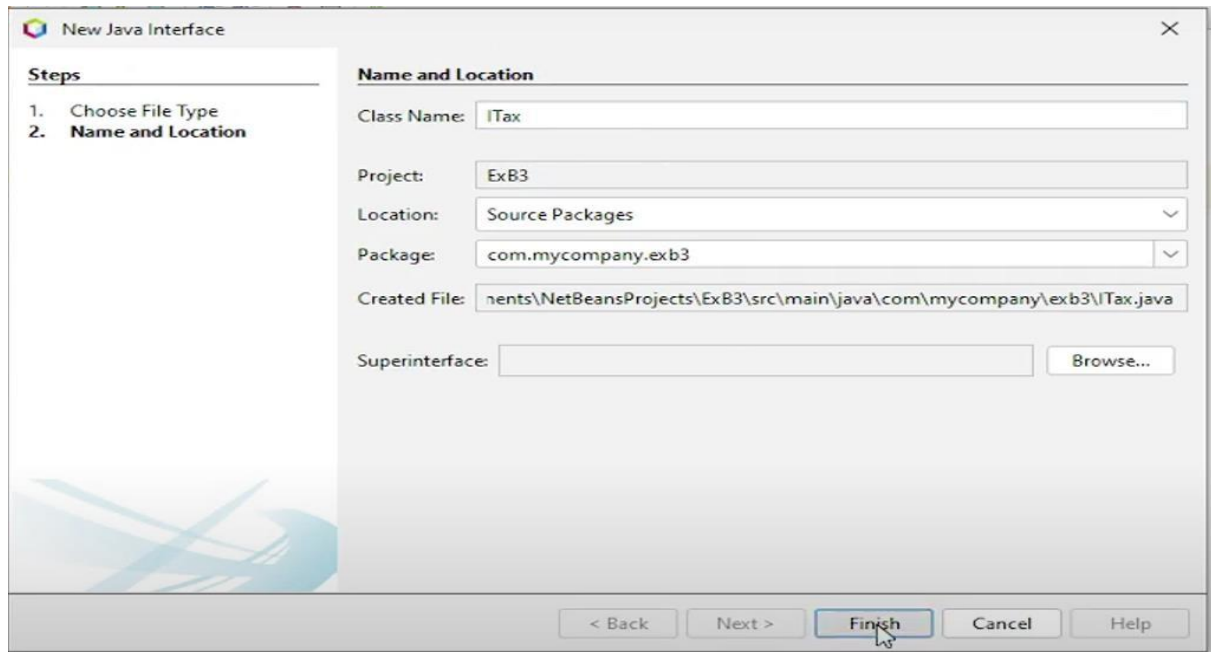




No need to write the code inside ExB3.java.

Then go to Projects->ExB3-> Source Package folder->Inside Source Package, locate package named Com.mycompany.ExB3 right click ->New-> Java Interface -> ITax -> Finish





ITax.java

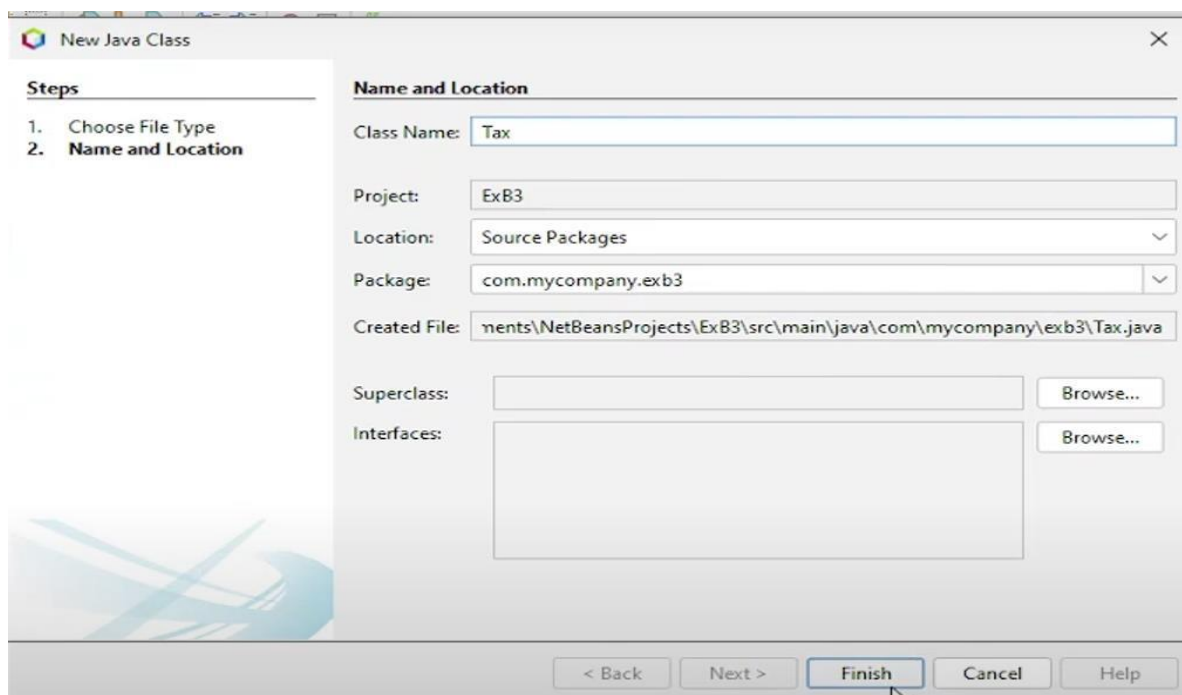
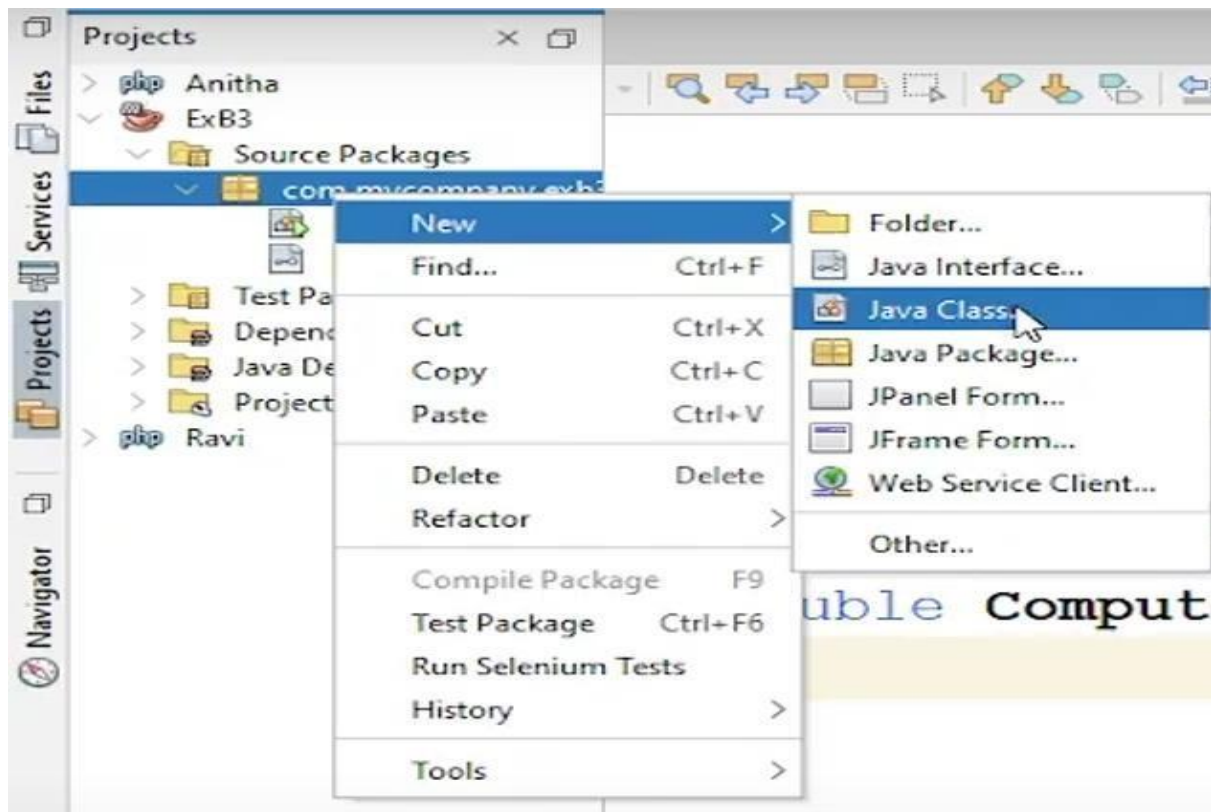
```
package com.mycompany.exb3;
```

```
import java.rmi.Remote;
```

```
import java.rmi.RemoteException;
```

```
public interface ITax extends Remote {  
    public double ComputeTax(double amount)throws RemoteException;  
}
```

Then go to Projects->ExB3-> Source Package folder->Inside Source Package, locate package named Com.mycompany.ExB3 right click ->New-> Java Class -> Tax -> Finish



Tax.java

```
package com.mycompany.exb3;

import java.rmi.RemoteException;
import java.rmi.server.UnicastRemoteObject;

public class Tax extends UnicastRemoteObject implements ITax {

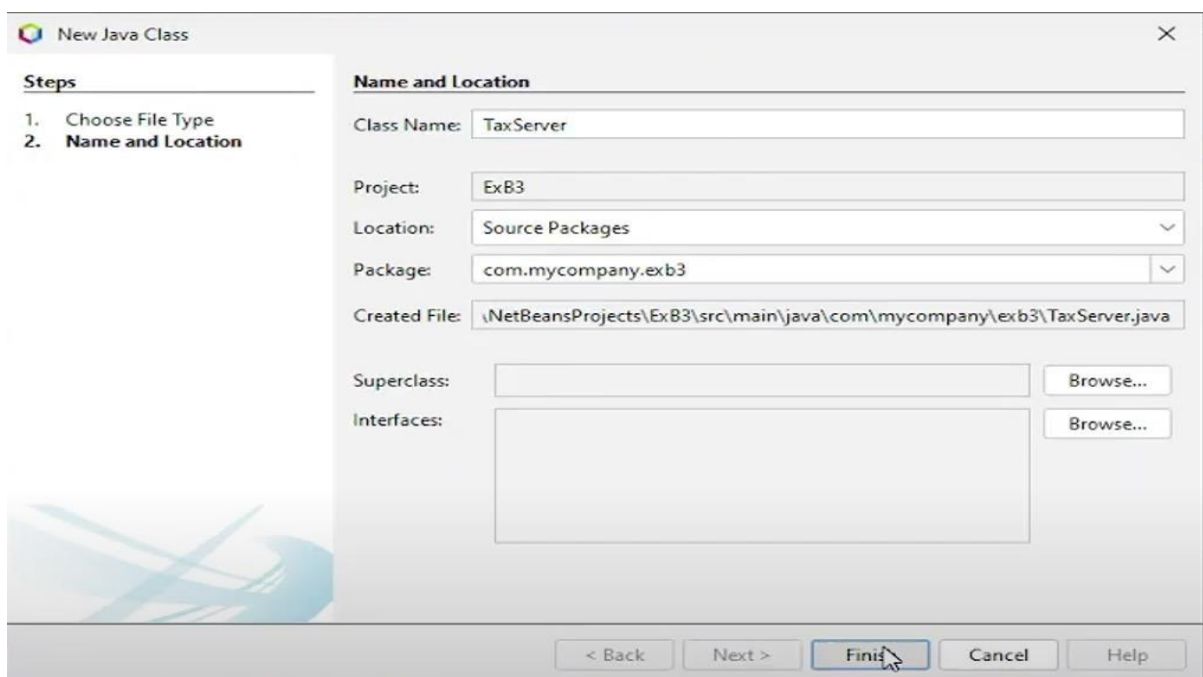
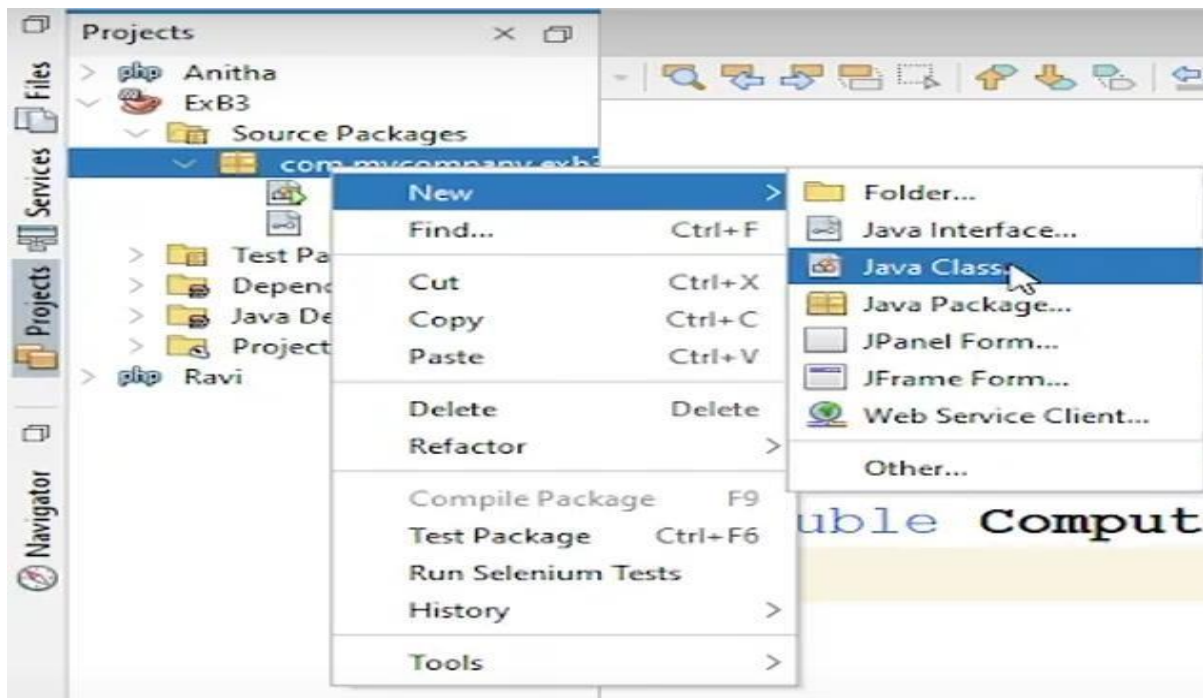
    public Tax() throws RemoteException{
        super();
    }

    @Override
    public double ComputeTax(double amount) throws RemoteException {
        double tax;
        if(amount<300000){
            tax=0;

        }else if(amount<600000){
            tax=(amount-300000)*0.05;
        }else if(amount<900000){
            tax=15000+(amount-600000)*0.1;
        }else if(amount<1200000){
            tax=15000+30000+(amount-900000)*0.15;
        }else if(amount<1500000){
            tax=15000+30000+45000+(amount-1200000)*0.2;
        }else{
            tax=15000+30000+45000+60000+(amount-1500000)*0.3;
        }

        return tax;
    }
}
```

Then go to Projects-> ExB3->Souce Package folder->Inside Source Package, locate package named Com.mycompany.ExB3 right click ->New-> Java Class ->TaxServer -> Finish



TaxServer.java

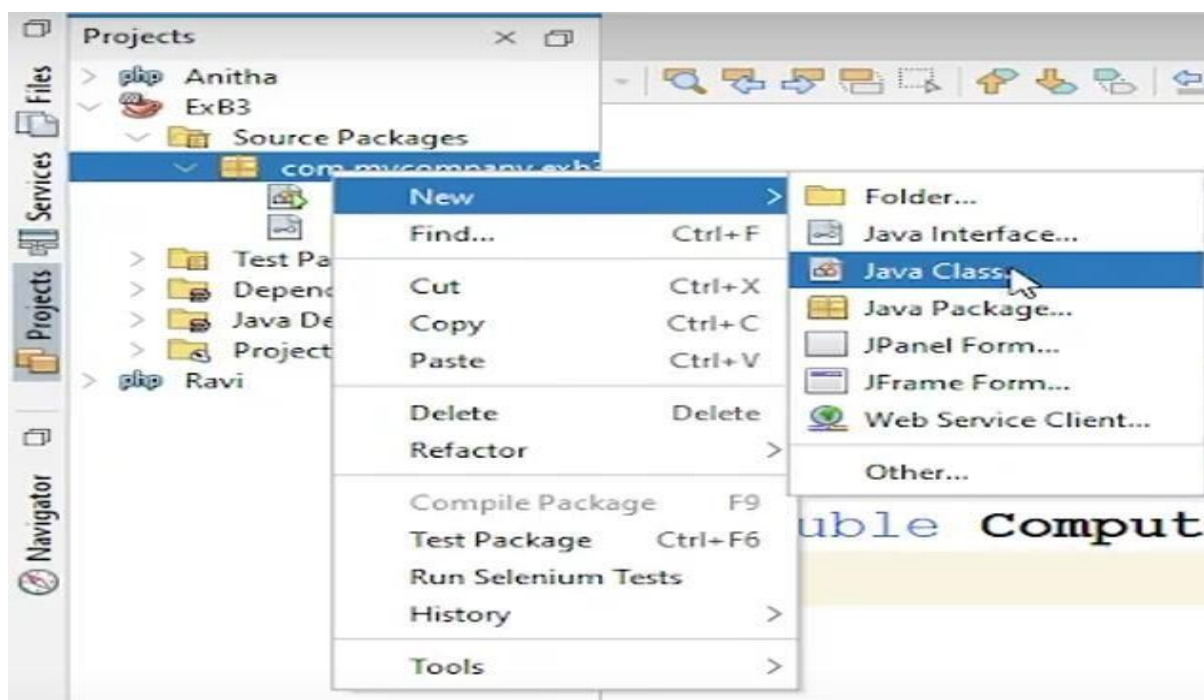
```
package com.mycompany.exb3;
```

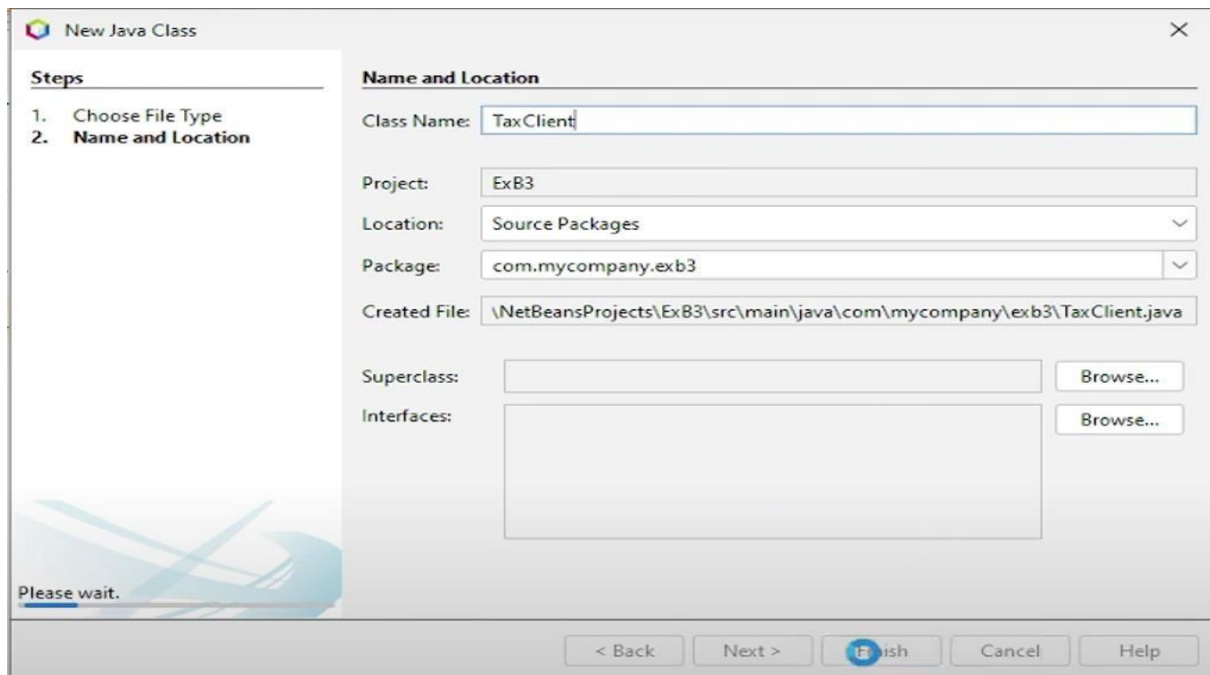
```
import java.rmi.registry.LocateRegistry;
```

```
import java.rmi.registry.Registry;
```

```
public class TaxServer {  
    public static void main(String[] args) throws Exception {  
        Tax tx=new Tax();  
        Registry rg=LocateRegistry.createRegistry(33221);  
        rg.bind("TaxServer", tx);  
        System.out.println("server started .....");  
    }  
}
```

Then go to Projects->right click on->ExB3 Souce Package folder->Inside Source Package, locate package named Com.mycompany.ExB3 right click ->New-> Java Class ->TaxClient->Finish





TaxClient.java

```
package com.mycompany.exb3;
```

```
import java.rmi.registry.LocateRegistry;
```

```
import java.rmi.registry.Registry;
```

```
import java.util.Scanner;
```

```
public class TaxClient {  
    public static void main(String[] args) throws Exception{  
        Registry rg=LocateRegistry.getRegistry(33221);  
        ITax tx=(ITax) rg.lookup("TaxServer");  
        Scanner in=new Scanner(System.in);  
        String ans="y";  
        double amt;  
        while(ans.equals("y")){  
            System.out.print("Enter the total amount: ");  
            amt=in.nextDouble();  
            System.out.println("Tax amount is: "+tx.ComputeTax(amt));  
            System.out.print("Do you want to continue [y/n] ?");  
            in.nextLine();  
            ans=in.nextLine().trim().toLowerCase();  
        }  
    }  
}
```



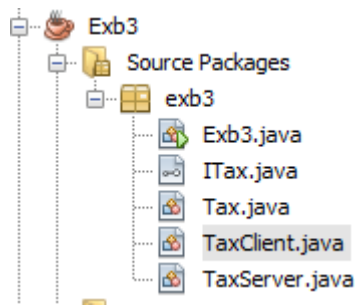
```

    }
}

}
*****

```

Total 5 files



To get the output:

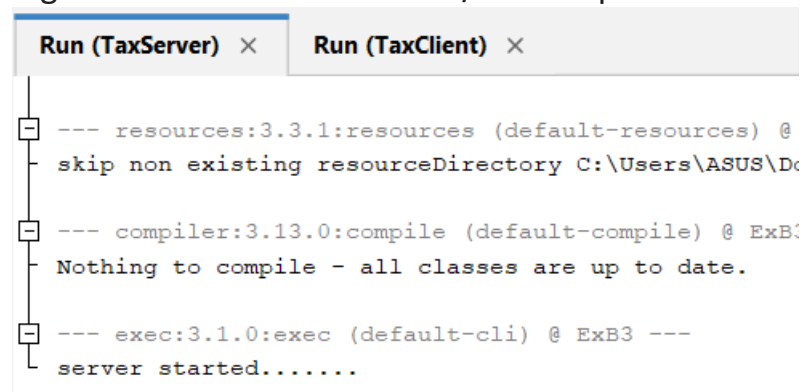
First run **TaxServer.java**

Then run **TaxClient.java**

Output:

First run **TaxServer.java**

Right click on code editor area/ editor space -> Run File



Then run TaxClient.java

```
Enter the total amount: 200000
Tax amount is: 0.0
Do you want to continue [y/n] ?y
Enter the total amount: 400000
Tax amount is: 5000.0
Do you want to continue [y/n] ?y
Enter the total amount: 700000
Tax amount is: 25000.0
Do you want to continue [y/n] ?y
Enter the total amount: 1000000
Tax amount is: 60000.0
Do you want to continue [y/n] ?y
Enter the total amount: 1400000
Tax amount is: 130000.0
Do you want to continue [y/n] ?y
Enter the total amount: 2500000
Tax amount is: 450000.0
Do you want to continue [y/n] ?n
```

BUILD SUCCESS