

1. Add complex numbers

```
public class Complex{  
    double real, img;  
    Complex(double r, double i){  
        this.real = r;  
        this.img= i;  
    }  
    public static Complex sum(Complex c1, Complex c2)  
    {  
        Complex temp = new Complex(0, 0);  
  
        temp.real = c1. real+ c2.real;  
        temp.img = c1.img+ c2.img;  
        return temp;  
    }  
    public static void main(String args[]) {  
        Complex c1 = new Complex(2, 10);  
        Complex c2 = new Complex(4.5, 3.5);  
        Complex temp = sum(c1, c2);  
        System.out.printf("Sum is: "+ temp.real+" "+ "+ temp.img +"i");  
    }  
}
```

output

```
Command Prompt
Microsoft Windows [Version 10.0.18363.1440]
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C:\Users\micromedia02>cd desktop
C:\Users\micromedia02\Desktop>javac wel.java
wel.java:3: error: cannot find symbol
    public static void main(String[] args) {
                        ^
    symbol:   class String
    location: class wel
1 error

C:\Users\micromedia02\Desktop>javac wel.java
C:\Users\micromedia02\Desktop>java wel
welcome to world of java

C:\Users\micromedia02\Desktop>javac Complex.java
C:\Users\micromedia02\Desktop>java Complex
Sum is: 6.5 + 13.5i
C:\Users\micromedia02\Desktop>
```

2.define a class product with data members pcode,pname,price.create 3 objects of the class and find the product having the lowest price

```
public class product {

    int pcode;

    String pname;

    int price;

    public static void main(String[] args) {

        int smallest;

        product p1 = new product();

        product p2 = new product();

        product p3 = new product();

        p1.pcode=2000;

        p1.pname="laptop";

        p1.price=10000;

        p2.pcode=1110;

        p2.pname="hp";

        p2.price=35000;
```

```
p3.pcode=2002;
p3.pname="intel i3";
p3.price=40000;
if(p1.price<p2.price) {
    if(p3.price<p1.price) {
        smallest = p3.price;
    } else {
        smallest = p1.price;
    }
} else {
    if(p2.price<p3.price) {
        smallest = p2.price;
    } else {
        smallest = p3.price;
    }
}

System.out.println(smallest + " is the cheapest.");
}
}
```

```
Select Command Prompt
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C:\Users\micromedia02>cd desktop
C:\Users\micromedia02\Desktop>javac wel.java
wel.java:3: error: cannot find symbol
    public static void main(String[] args) {
                        ^
    symbol:   class String
    location: class wel
1 error
C:\Users\micromedia02\Desktop>javac wel.java
C:\Users\micromedia02\Desktop>java wel
welcome to world of java
C:\Users\micromedia02\Desktop>javac Complex.java
C:\Users\micromedia02\Desktop>java Complex
Run 1: 6.5 + 13.5i
C:\Users\micromedia02\Desktop>javac product.java
error: file not found: product.java
Usage: javac <options> <source files>
use --help for a list of possible options
C:\Users\micromedia02\Desktop>javac product.java
C:\Users\micromedia02\Desktop>java product
10000 is the cheapest.
C:\Users\micromedia02\Desktop>
```