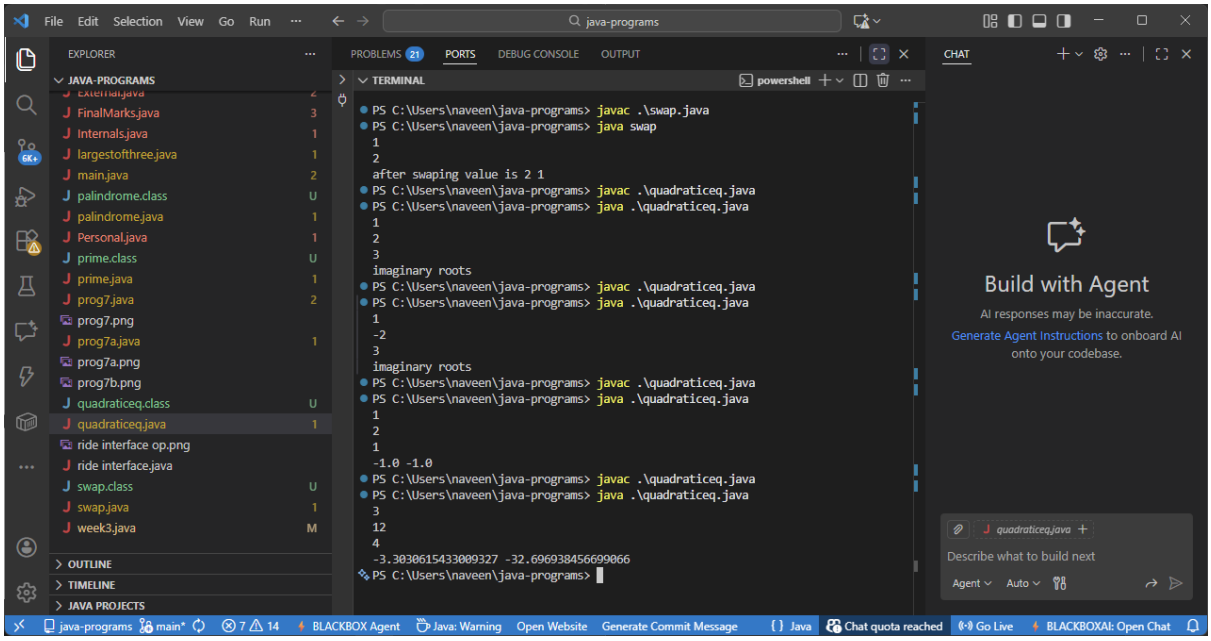
QUADRATIC EQUATION

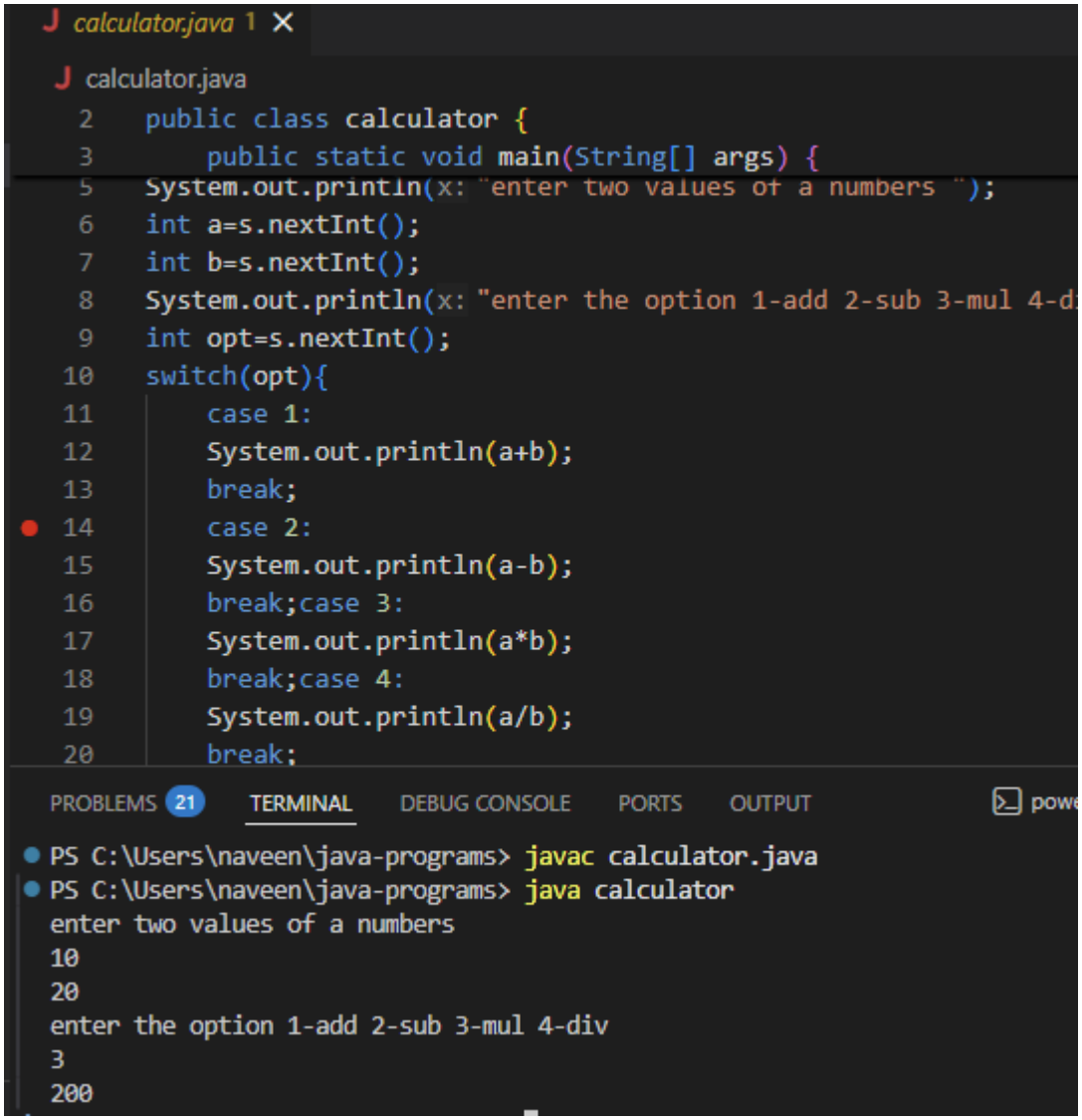
```
import java.util.*;
public class quadraticeq {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
double a=sc.nextInt();
double b=sc.nextInt();
 double c=sc.nextInt();
double dis=Math.pow(b,2)-(4*a*c);
double r1,r2;

if(dis>0){
     r1=(-b+Math.sqrt(dis))/2*a;
     r2=(-b-Math.sqrt(dis))/2*a;
     System.out.println(r1+" "+r2);
}
if(dis==0){
    r1=-b/2*a;
    r2=r1;
     System.out.println(r1+" "+r2);
}
if(dis<0){
    System.out.println("imaginary roots");
}



    }
}
```



1.Calculator

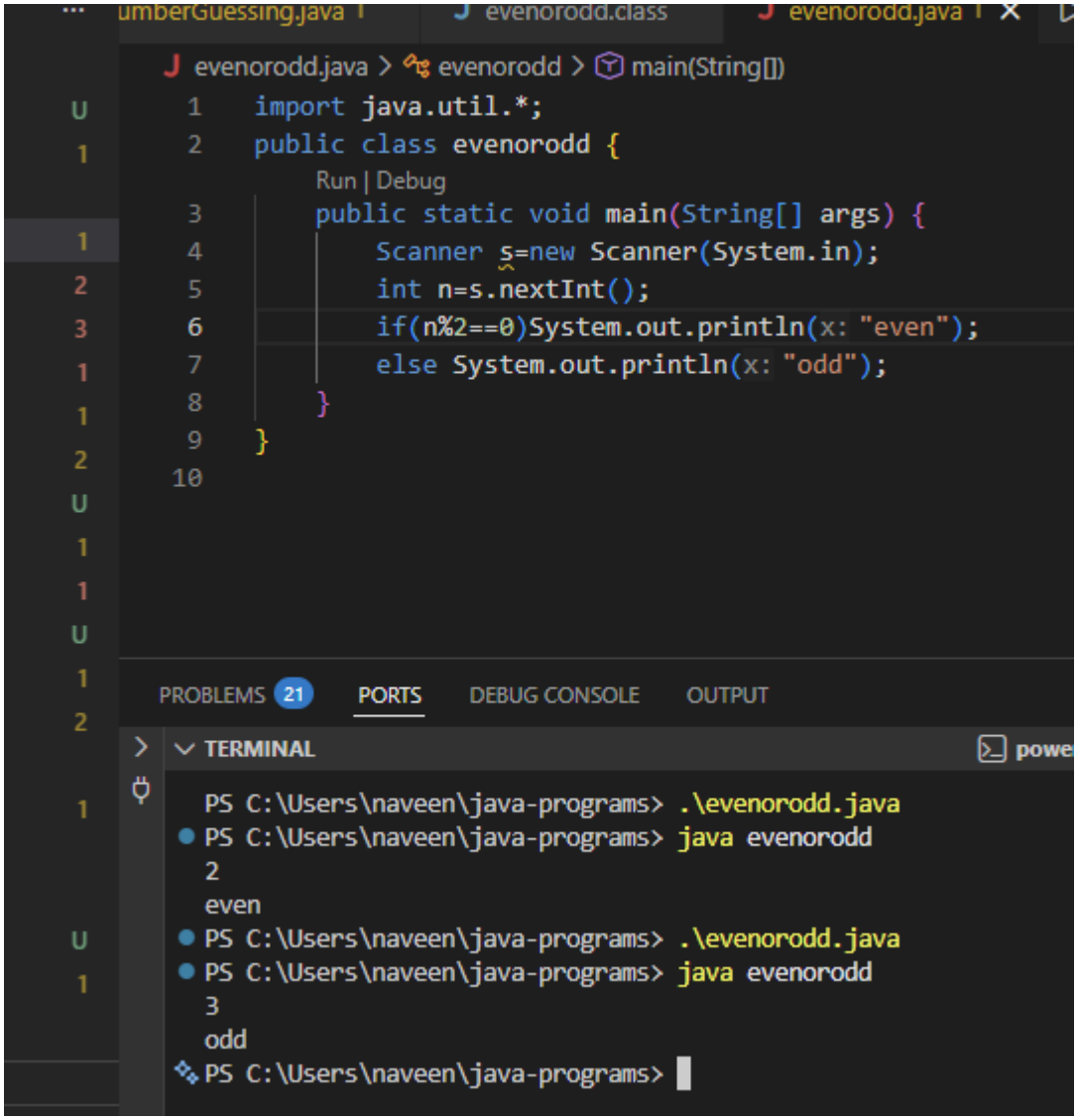
```
import java.util.*;
public class calculator {
    public static void main(String[] args) {
        Scanner s=new Scanner(System.in);
System.out.println("enter two values of a numbers ");
int a=s.nextInt();
int b=s.nextInt();
System.out.println("enter the option 1-add 2-sub 3-mul 4-div");
int opt=s.nextInt();
switch(opt){
    case 1:
    System.out.println(a+b);
```

```
    break;
    case 2:
    System.out.println(a-b);
    break;case 3:
    System.out.println(a*b);
    break;case 4:
    System.out.println(a/b);
    break;
default:
System.out.println("invalid input");
}
    }
}
```



2.EVEN OR ODD

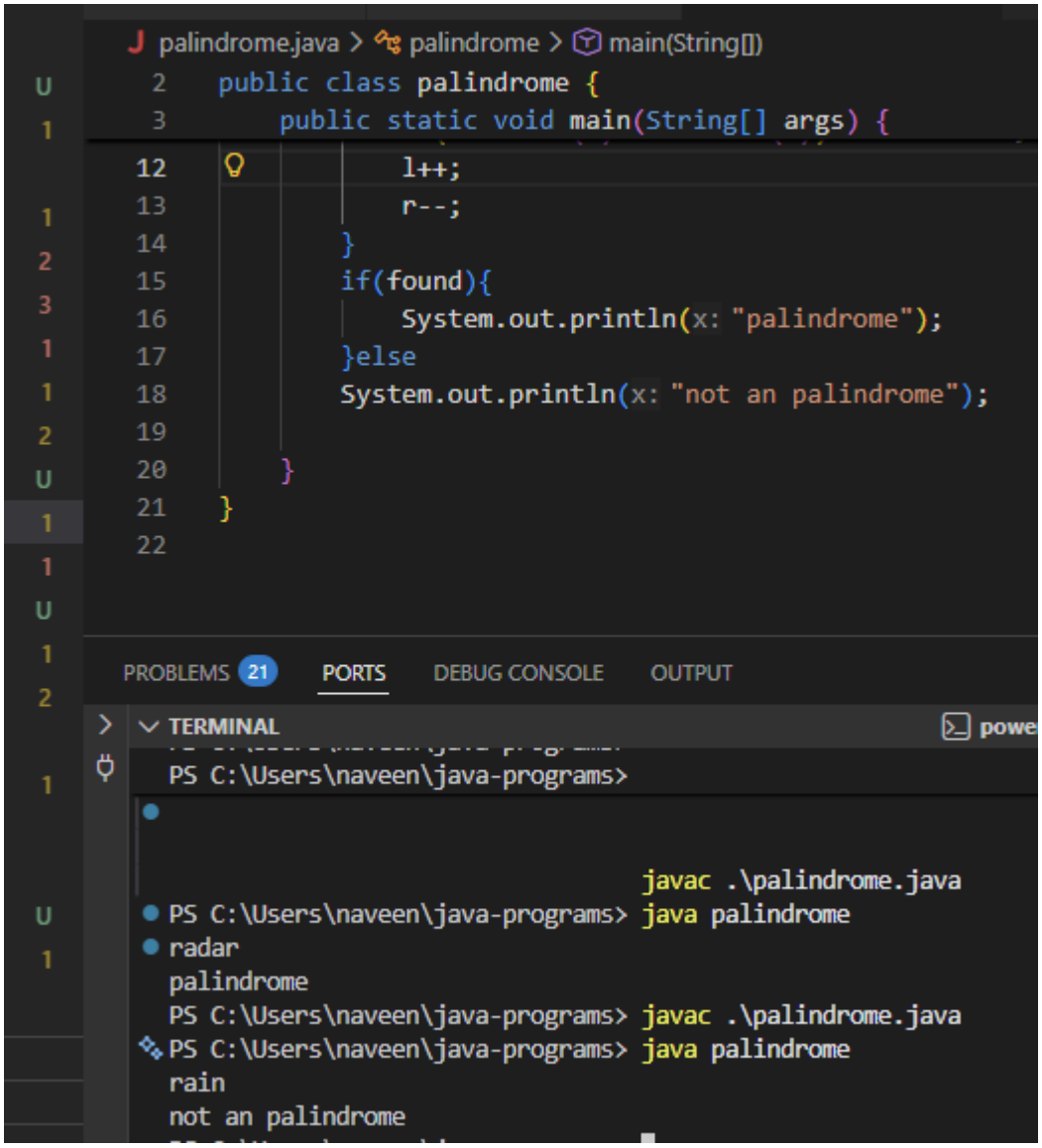
```
import java.util.*;
public class evenorodd {
   public static void main(String[] args) {
      Scanner s=new Scanner(System.in);
      int n=s.nextInt();
      if(n%2==0)System.out.println("even");
      else System.out.println("odd");
   }
}
```



3.PALINDROME

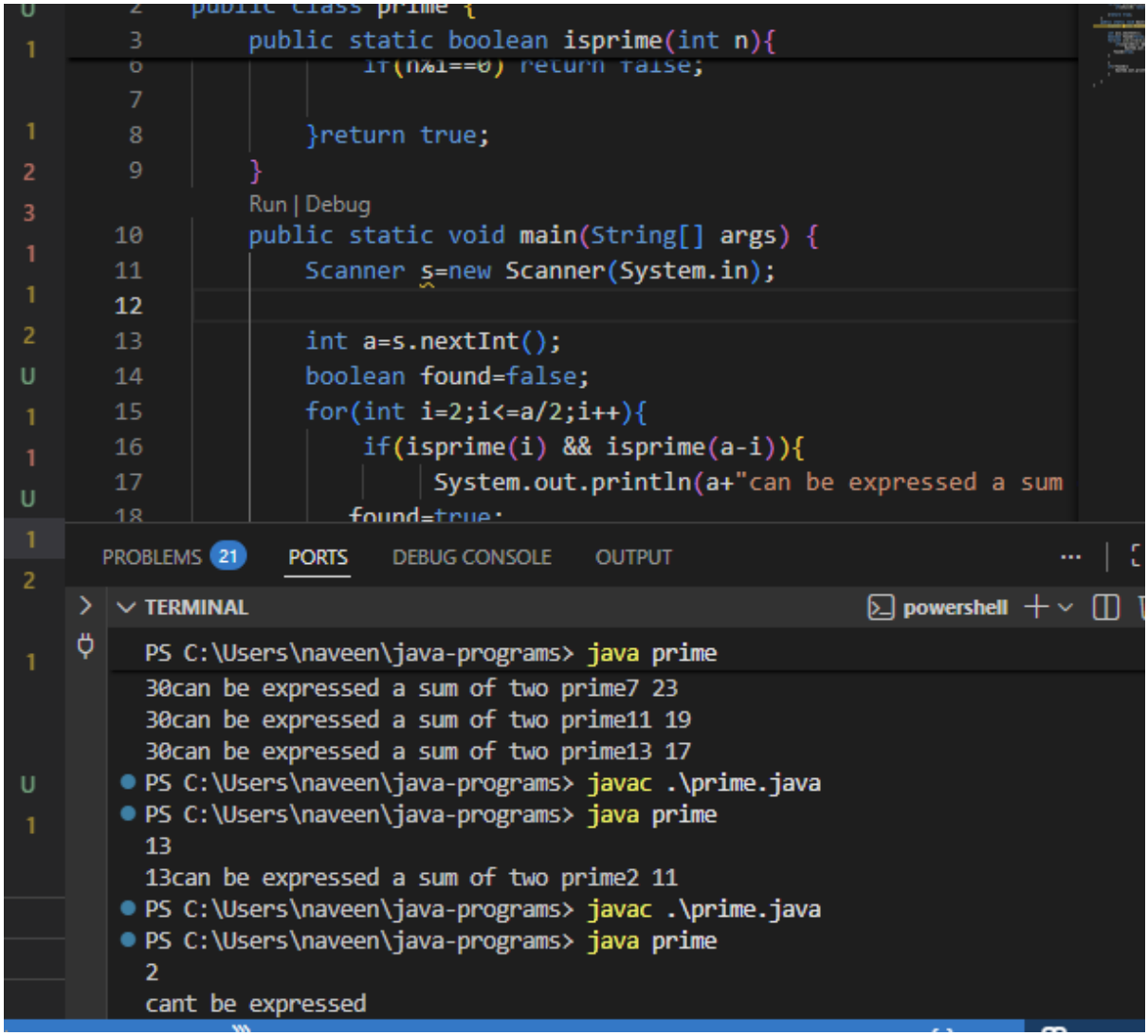
```
import java.util.*;
public class palindrome {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        String s=sc.nextLine();
        s=s.toLowerCase();
        int l=0;
        int r=s.length()-1;
        boolean found=true;
        while(l<=r){
```

```
        if(s.charAt(l)!=s.charAt(r)) found=false;
        l++;
        r--;
      }
      if(found){
        System.out.println("palindrome");
      }else
      System.out.println("not an palindrome");

    }
}
```



4.PRIME NUMBER

```
import java.util.*;
public class prime {
   public static boolean isprime(int n){
      if(n<=1) return false;
      for(int i=2;i*i<=n;i++){
         if(n%i==0) return false;

      }return true;
   }
   public static void main(String[] args) {
      Scanner s=new Scanner(System.in);

      int a=s.nextInt();
      boolean found=false;
      for(int i=2;i<=a/2;i++){
         if(isprime(i) && isprime(a-i)){
              System.out.println(a+"can be expressed a sum of two prime"+i+" "+(a-i));
        found=true;
      }

      }
      if(!found){
         System.out.println("cant be expressed");
      }

   }
}
```



5.SWAP

```
import java.util.Scanner;


public class swap {


    public static void main(String[] args) {
        Scanner s=new Scanner(System.in);
        int a=s.nextInt();
        int b=s.nextInt();
        int t=a;
        a=b;
```

```
        b=t;
        System.out.println("after swaping value is"+" "+a+" "+b);

    }
}
```