Question1:

```java
import java.util.Scanner;

public class question1 {
   //Write a program to create a basic calculator that can perform addition, subtraction, multiplication, and division. The program should ask for two numbers (floating point) and perform all the operations


   public static void main(String[] args) {
       Scanner i1 = new Scanner(System.in);


       System.out.println("enter the number 1");
       int n1 = i1.nextInt();

       System.out.println("enter the number 2");

       float n2 = i1.nextFloat();


       //basic calucation

       Float  sum = (float)(n1+n2),sub = (float)( n1-n2),product = (float)(n1*n2),division =(float)(n1/n2);
       System.out.println("the sum is=" +sum  +"\n"+ "the sub is="+sub +"\n" +"the product is="+product +"\n"+ "the division is="+division);







   }
}
```

Output

```
C:\Users\HP\Downloads\java challanges and coding questions>javac question1.java

C:\Users\HP\Downloads\java challanges and coding questions>java question1
enter the number 1
23
enter the number 2
12
the sum is=35.0
the sub is=11.0
the product is=276.0
the division is=1.9166666

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question 2;

```java
import java.util.Scanner;

public class question1 {
   //Write a program to create a basic calculator that can perform addition, subtraction, multiplication, and division. The program should ask for two numbers (floating point) and perform all the operations


   public static void main(String[] args) {
       Scanner i1 = new Scanner(System.in);


       System.out.println("enter the number 1");
       int n1 = i1.nextInt();

       System.out.println("enter the number 2");

       float n2 = i1.nextFloat();


       //basic calucation

       Float  sum = (float)(n1+n2),sub = (float)( n1-n2),product = (float)(n1*n2),division =(float)(n1/n2);
       System.out.println("the sum is=" +sum  +"\n"+ "the sub is="+sub +"\n" +"the product is="+product +"\n"+ "the division is="+division);







   }
}
```

Output:

```
C:\Users\HP\Downloads\java challanges and coding questions>javac question1.java

C:\Users\HP\Downloads\java challanges and coding questions>java question1
enter the number 1
23
enter the number 2
12
the sum is=35.0
the sub is=11.0
the product is=276.0
the division is=1.9166666

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question 3;

```java
import java.util.Scanner;

public class question3 {
   //Write a program to find the side of the square whose perimeter you read
from user

   public static void main(String[] args) {

        Scanner s1 = new Scanner(System.in);

        System.out.println("enter the  perimeter");
        int n1= s1.nextInt();
        float sides  = (float) n1/4;
        System.out.println("sides ="+sides);



   }
}
```

Output;

```
C:\Users\HP\Downloads\java challanges and coding questions>javac question3.java

C:\Users\HP\Downloads\java challanges and coding questions>java question3
enter the  perimeter
16
sides =4.0

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question4;

```java
import java.util.Scanner;

public class question4 {
   //Write a program the find the distance in yards and miles for the
distance provided by user in feets

   public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the distance in feets: ");
        int n1 = scanner.nextInt();
        System.out.println("Enter the distance in miles= "+n1*1/3);
        System.out.println("Enter the distance in yard = "+1700*(n1*1/3));
```

```
    }
}
```

Output;

```
C:\Users\HP\Downloads\java challanges and coding questions>java question4.java
Enter the distance in feets:
23
Enter the distance in miles= 7
Enter the distance in yard = 11900

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question 5

```
import java.util.Scanner;

public class question5 {
  // Write a program to input the unit price of an item and the quantity to
be bought. Then, calculate the total price.
  public static void main(String[] args) {

      int burger_price = 50;
      int pizza_price = 300;
      int fries_price = 60;

      Scanner s1 = new Scanner(System.in);
      System.out.println("enter the number of burger");
      int n1 = s1.nextInt();
      System.out.println("enter the number of pizza");
      int n2 = s1.nextInt();
      System.out.println("enter the number of fries");
      int n3= s1.nextInt();


      System.out.println("the total amount =" +(burger_price*n1 +
pizza_price*n2  + fries_price*n3) );




  }

}
```

Output

```
Microsoft Windows [Version 10.0.22631.4890]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP\Downloads\java challanges and coding questions>javac question5.java

C:\Users\HP\Downloads\java challanges and coding questions>java question5
enter the number of burger
1
enter the number of pizza
2
enter the number of fries
5
the total amount =950

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question6

```java
import java.util.Scanner;

public class question6 {
   //Write a program to take 2 numbers and print their quotient and reminder

   public static void main(String[] args) {
       Scanner s1 = new Scanner(System.in);
       System.out.println("enter the number1");
       int n1 = s1.nextInt();
       System.out.println("enter the number2");
       int n2 = s1.nextInt();

        int remainder = n1%n2;
        int quatient = n1/n2;
       System.out.println("remainder"+remainder);
       System.out.println("quatient"+quatient);




   }
}
```

Output:

```
enter the number2
13
remainder12
quatient0

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question7:

```java
import java.util.Scanner;

public class question7 {
   //Write an IntOperation program by taking a, b, and c as input values and
print the following integer operations
   // a + b *c, a * b + c, c + a / b, and a % b + c. Please also understand
the precedence of the operators.
   public static void main(String[] args) {


               Scanner scanner = new Scanner(System.in);

               System.out.print("Enter value for a: ");
               int a = scanner.nextInt();

               System.out.print("Enter value for b: ");
               int b = scanner.nextInt();

               System.out.print("Enter value for c: ");
               int c = scanner.nextInt();


               int result1 = a + b * c;
               int result2 = a * b + c;
               int result3 = c + a / b;
               int result4 = a % b + c;
               System.out.println("a + b * c = " + result1);
               System.out.println("a * b + c = " + result2);
               System.out.println("c + a / b = " + result3);
               System.out.println("a % b + c = " + result4);

               scanner.close();
           }
       }
```

Output

```
C:\Users\HP\Downloads\java challanges and coding questions>javac question7.java

C:\Users\HP\Downloads\java challanges and coding questions>java question7
Enter value for a: 12
Enter value for b: 23
Enter value for c: 1
a + b * c = 35
a * b + c = 277
c + a / b = 1
a % b + c = 13

C:\Users\HP\Downloads\java challanges and coding questions>
```

Question8:

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

```
;

   public class question8 {
      //Similarly, write the DoubleOpt program by taking double values and
doing the same operations.
       public static void main(String[] args) {


           Scanner scanner = new Scanner(System.in);

           System.out.print("Enter value for a: ");
           double a = scanner.nextDouble();

           System.out.print("Enter value for b: ");
           double b = scanner.nextDouble();

           System.out.print("Enter value for c: ");
           double c = scanner.nextDouble();


           double result1 = a + b * c;
           double result2 = a * b + c;
           double result3 = c + a / b;
           double result4 = a % b + c;
           System.out.println("a + b * c = " + result1);
           System.out.println("a * b + c = " + result2);
           System.out.println("c + a / b = " + result3);
           System.out.println("a % b + c = " + result4);

           scanner.close();
       }
   }
```

output:

```
C:\Users\HP\Downloads\java challanges and coding questions>javac question8.java

C:\Users\HP\Downloads\java challanges and coding questions>java question8
Enter value for a: 12.4
Enter value for b: 11.3
Enter value for c: 12.9
a + b * c = 158.17000000000002
a * b + c = 153.02
c + a / b = 13.997345132743362
a % b + c = 14.0

C:\Users\HP\Downloads\java challanges and coding questions>
```