Question 1)

```
package Lab2Assignment;

public class Question1 {

	public static void main(String[] args) {
		int sum = 0, count = 0;
		for (int i = 101; i < 200; i++)
		{
		    if (i % 7 == 0)
		    {
		        sum = sum + i;
		        count++;
		    }
		}
		System.out.println("The Sum of the number between 100 to 200 which are
divisible by 7 is: "+sum);
		System.out.println("Total numbers between 100 to 200 which are
divisible by 7 is: "+count);
	       // TODO Auto-generated method stub

	}

}
```

Question 2)

```
package Lab2Assignment;
import java.util.Scanner;

public class Question2 {

	public static void main(String[] args) {
		int a, b, c, largest;
		//object of the Scanner class
		Scanner sc = new Scanner(System.in);
		//reading input from the user
		System.out.println("Enter the first number:");
		a = sc.nextInt();
		System.out.println("Enter the second number:");
		b = sc.nextInt();
		System.out.println("Enter the third number:");
		c = sc.nextInt();
		largest = c > (a > b ? a : b) ? c : ((a > b) ? a : b);
		System.out.println("The largest number is: "+largest);
		// TODO Auto-generated method stub

	}

}
```

Question 3)

```
package Lab2Assignment;
import java.util.Scanner;

public class Question3 {

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

```
            System.out.print("Enter a character: ");
            Scanner sc = new Scanner(System.in);
            char chr = sc.next().charAt(0);
            int asciiValue = chr;
            System.out.println("ASCII value of " +chr+ " is: "+asciiValue);

            // TODO Auto-generated method stub

      }

}
```

Question 4)

```
package Lab2Assignment;

public class Question4 {

      public static void main(String[] args) {
            char ch = 'i';

        if(ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' )
            System.out.println(ch + " is vowel");
        else
            System.out.println(ch + " is consonant");
            // TODO Auto-generated method stub

      }

}
```

Question 5)

```
package Lab2Assignment;

public class Question5 {

      public static void main(String[] args) {
            double number = 12.3;

        // true if number is less than 0
        if (number < 0.0)
            System.out.println(number + " is a negative number.");

        // true if number is greater than 0
        else if ( number > 0.0)
            System.out.println(number + " is a positive number.");

        // if both test expression is evaluated to false
        else
            System.out.println(number + " is 0.");
            // TODO Auto-generated method stub

      }

}
```

Question 6)

```
package Lab2Assignment;
import java.util.*;
public class Question6 {

	public static void main(String[] args) {
		System.out.println("Enter the value of x and y");
	  Scanner sc = new Scanner(System.in);
	  /*Define variables*/
	  int x = sc.nextInt();
	  int y = sc.nextInt();
	  System.out.println("before swapping numbers: "+x +" "+ y);
	 /*Swapping*/
	  x = x + y;
	  y = x - y;
	  x = x - y;
	  System.out.println("After swapping: "+x +"  " + y);
		// TODO Auto-generated method stub

	}

}
```

Question 8)

```
package Lab2Assignment;
/*WAP to input basic salary of an employee and calculate its
Gross salary according to following:
Basic Salary <= 10000 : HRA = 20%, DA = 80%
Basic Salary <= 20000 : HRA = 25%, DA = 90%
Basic Salary > 20000 : HRA = 30%, DA = 95%  */
import java.util.*;
public class Question8 {

	public static void main(String[] args) {
		int hra = 0;
		int da;
		int gross;


		System.out.println("Enter a Base salary: ");
		Scanner sc = new Scanner(System.in);
		int sal = sc.nextInt();



		if(sal <= 10000)
		{

		    hra= (int) (0.2 * sal);
		      da=(int)( 0.8 * sal);
		    gross=(int)( sal + hra + da);

		      System.out.println("Base salary:" + sal);
		    System.out.println("hra:" + hra);
		    System.out.println("Da:" + da);
		    System.out.println("Gross Salary:" + gross );

		}
```

```
            else if(sal <= 20000)
             {
                hra= (int) (0.25 * sal);
                  da=(int)( 0.9 * sal);
                gross=(int)( sal + hra + da);

                  System.out.println("Base salary:" + sal);
                System.out.println("hra:" + hra);
                System.out.println("Da:" + da);
                System.out.println("Gross Salary:" + gross );
             }

            else if(sal > 20000)
             {
                hra= (int) (0.3 * sal);
                  da=(int)( 0.95 * sal);
                gross=(int)( sal + hra + da);

                  System.out.println("Base salary:" + sal);
                System.out.println("hra:" + hra);
                System.out.println("Da:" + da);
                System.out.println("Gross Salary:" + gross );
             }




      }

}
-------------------------------------------------------------------------------------
-------------------------------------------------
Question 9)
package Lab2Assignment;

public class Question9 {

      public static void main(String[] args) {
            int number=20;
            System.out.print("List of even numbers from 1 to "+number+": ");
            for (int i=10; i<=number; i++)
            {
            //logic to check if the number is even or not
            //if i%2 is equal to zero, the number is even
            if (i%2==0)
            {
            System.out.print(i + " ");
            }
            }
            // TODO Auto-generated method stub

      }

}
-------------------------------------------------------------------------------------
-------------------------------------------------
Question 10)
package Lab2Assignment;
```

```
public class Question10 {

      public static void main(String[] args) {
            int n = 23;
        checkPrime(n);
    }

    private static void checkPrime(int n) {
        int count = 0;

        // negative numbers, 0 and 1 are not prime
        if (n < 2)
            System.out.println ("The given is number " + n + " is not prime");

        // checking the number of divisors b/w [1, n]
        for (int i = 1; i <= n; i++)
        {
            if (n % i == 0)
                count += 1;
        }

        // if count of divisors greater than 2 then its not prime
        if (count > 2)
            System.out.println ("The given is number " + n + " is not prime");

        else
            System.out.println ("The given is number " + n + " is prime");
            // TODO Auto-generated method stub

      }

}
--------------------------------------------------------------------------------
------------------------------------------------------
```