

```
//Question 1.....
public class Question1
{
    public static void main(String[] args)
    {
        int number = 9876543, reverse = 0;
        while(number != 0)
        {
            int remainder = number % 10;
            reverse = reverse * 10 + remainder;
            number = number/10;
        }
        System.out.println("The reverse of the given number is: " + reverse);
    }
}
```

//.....

//question 2.....

```
class Question2{
    public static void main(String args[]){
        int r,sum=0,temp;
        int n=454;

        temp=n;
        while(n>0){
            r=n%10;
            sum=(sum*10)+r;
            n=n/10;
        }
        if(temp==sum)
            System.out.println("palindrome number ");
        else
            System.out.println("not palindrome");
    }
}
```

//.....

//question 3.....

```
import java.util.Scanner;

public class Exercise12 {

    public static void main(String[] args) {

        Scanner in = new Scanner(System.in);

        System.out.print("Input first number: ");
        int num1 = in.nextInt();
        System.out.print("Input second number: ");
        int num2 = in.nextInt();
        System.out.print("Input third number: ");
```

```

int num3 = in.nextInt();
System.out.print("Input fourth number: ");
int num4 = in.nextInt();
System.out.print("Enter fifth number: ");
int num5 = in.nextInt();

System.out.println("Average of five numbers is: " + (num1 + num2 + num3 + num4 + num5) / 5);
}
}

```

```
//.....
```

```
//question 4.....
```

```

public class Question4 {

    public static void main(String[] args) {

        int number = 371, originalNumber, remainder, result = 0;

        originalNumber = number;

        while (originalNumber != 0)
        {
            remainder = originalNumber % 10;
            result += Math.pow(remainder, 3);
            originalNumber /= 10;
        }

        if(result == number)
            System.out.println(number + " is an Armstrong number.");
        else
            System.out.println(number + " is not an Armstrong number.");
    }
}

```

```
//.....
```

```
//question 5.....
```

```

public class Question5{
    public static void main(String args[]){
        int i,m=0,flag=0;
        int n=3;
        m=n/2;
        if(n==0||n==1){
            System.out.println(n+" is not prime number");
        }else{
            for(i=2;i<=m;i++){
                if(n%i==0){
                    System.out.println(n+" is not prime number");
                    flag=1;
                    break;
                }
            }
        }
    }
}

```

```

    if(flag==0) { System.out.println(n+" is prime number"); }
    }
}
}

```

//.....

//question 6.....

```

import java.util.*;
class Question6
{
    public static void main(String args[])
    {
        System.out.println("Enter the value of x and y");
        Scanner sc = new Scanner(System.in);

        int x = sc.nextInt();
        int y = sc.nextInt();
        System.out.println("before swapping numbers: "+x + " "+ y);

        x = x + y;
        y = x - y;
        x = x - y;
        System.out.println("After swapping: "+x + " " + y);
    }
}

```

//.....

//question 7.....

```

class Question7
{
    public static void main(String arg[])
    {
        int year=Integer.parseInt(arg[0]);
        if(year!=0)
        {
            if(year%400==0)
                System.out.println(year+" is a leap year");
            else if(year%100==0)
                System.out.println(year+" is not a leap year");
            else if(year%4==0)
                System.out.println(year+" is a leap year");
            else
                System.out.println(year+" is not a leap year");
        }
        else
            System.out.println("Year zero does not exist ");
    }
}

```

```
//.....
```

```
//question 8.....
```

```
public class Question8
{
    public static void main(String[] args)
    {
        int rows=5;
        for (int i= 0; i<= rows-1; i++)
        {
            for (int j=0; j<=i; j++)
            {
                System.out.print(" ");
            }
            for (int k=0; k<=rows-1-i; k++)
            {
                System.out.print("*" + " ");
            }
            System.out.println();
        }
    }
}
```

```
//.....
```

```
//question 9.....
```

```
import java.util.Scanner;
public class Question9
{
    public static void main(String args[])
    {
        int row, i, j, space = 1;
        System.out.print("Enter the number of rows you want to print: ");
        Scanner sc = new Scanner(System.in);
        row = sc.nextInt();
        space = row - 1;
        for (j = 1; j<= row; j++)
        {
            for (i = 1; i<= space; i++)
            {
                System.out.print(" ");
            }
            space--;
            for (i = 1; i <= 2 * j - 1; i++)
            {
                System.out.print("*");
            }
            System.out.println("");
        }
        space = 1;
        for (j = 1; j<= row - 1; j++)
        {
            for (i = 1; i<= space; i++)
```

```

{
System.out.print(" ");
}
space++;
for (i = 1; i<= 2 * (row - j) - 1; i++)
{
System.out.print("*");
}
System.out.println("");
}
}
}

```

//.....

//question 10.....

```

public class Question10 {

    public static void main(String[] args) {
        int rows = 5;

        for (int i = rows; i >= 1; --i) {
            for (int j = 1; j <= i; ++j) {
                System.out.print(j + " ");
            }
            System.out.println();
        }
    }
}

```

//.....

//question 11.....

```

public class Question11 {

    public static void main(String[] args) {

        int rows = 3;
        int columns = 4;

        System.out.println("Printing Hollow Rectangle Star Pattern");

        for (int i = 0; i < rows; i++ )
        {
            for (int j = 0 ; j < columns; j++ )
            {
                if (i == 0 || i == rows - 1 || j == 0 || j == columns - 1) {
                    System.out.print("*");
                }
            }
        }
    }
}

```

```

    else {
        System.out.print(" ");
    }
}
System.out.println();
}
}
}

//.....

```

//question 12.....

```

public class Question12 {

    public static void main(String[] args) {
        int rows = 7, number = 1;

        for(int i = 1; i <= rows; i++) {

            for(int j = 1; j <= i; j++) {
                System.out.print(number + " ");
                ++number;
            }

            System.out.println();
        }
    }
}

```

//.....

//question 13.....

```

package com.journaldev.patterns.pyramid;
import java.util.Scanner;

public class Question13 {

    private static void printPattern1(int rows) {
        // for loop for the rows
        for (int i = 1; i <= rows; i++) {

            int numberOfWhiteSpaces = rows - i;

            printString(" ", numberOfWhiteSpaces);

            printString(i + " ", i);

            System.out.println("");
        }
    }
}

```

```

private static void printString(String s, int times) {

```

```

for (int j = 0; j < times; j++) {
    System.out.print(s);
}
}

public static void main(String[] args) {

    Scanner scanner = new Scanner(System.in);
    System.out.println("Please enter the rows to print:");
    int rows = scanner.nextInt();
    scanner.close();

    System.out.println("Printing Pattern 1\n");
    printPattern1(rows);

}

}

```

//.....

//question 14.....

```

public class Question14 {
    public static void main(String[] args) {

        int size = 5;
        int alpha = 65;
        for (int i = 0; i < size; i++) {

            for (int j = 0; j < i; j++) {
                System.out.print(" ");
            }

            for (int k = 0; k < (size - i) - 1; k++) {
                System.out.print((char)(alpha+k));
            }
            System.out.println();
        }
    }
}

```

//.....

//question 15.....

```

public class Example {

    public static void main(String[] args) {

        int rows = 5;

        for (int i = rows ; i >= 1; i-- )
        {

```

```
for (int j = 1 ; j = i; j++ )  
{  
    System.out.println(i);  
}  
System.out.println();  
}  
}  
}
```