Program-1: Write a program to check whether a given string is palindrome or not

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

String str = obj.nextLine();

String reversedString = ""; // making new empty string

// Reversing a String

for(int i=0; i<str.length(); i++)

{

reversedString = str.charAt(i) + reversedString;

}

// Checking the string is Palindrome or not

if(str.equals(reversedString))

{

System.out.println(str+" is Palindrome");

}

else

{

System.out.println(str+" is Not a Palindrome");

}

}

}

Input: Guvi

Output: Guvi is Not a Palindrome

Input: racecar

Output: racecar is Palindrome

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Program-2: Write a program to print the reversed string

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

String str = obj.nextLine();

String reversedString = ""; // making new empty string

// Reversing a String

for(int i=0; i<str.length(); i++)

{

reversedString = str.charAt(i) + reversedString;

}

System.out.println("The reversed string of "+ str+" is " +reversedString);

}

}

Input: guvi

Output: The reversed string of guvi is ivug

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Program-3: Write a program to print the below pattern

Sample input: 4

Sample Output:

1

2 3

4 5 6

7 8 9 10

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

int n = obj.nextInt();

int temp=1;

for(int i=1; i<=n; i++)

{

for(int j=1; j<=i; j++)

{

System.out.print(temp+" ");

temp++;

}

System.out.println();

}

}

}

Input: 4

Output:

1

2 3

4 5 6

7 8 9 10

---------------------------------------------------------------------------------------

Program-4: Write a program to print following pattern.

Sample Input: 5

Smaple Output:

\* \*

\* \*

\*

\* \*

\* \*

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

int n = obj.nextInt();

int n1= (n+1)/2;

for(int i=1; i<=n1; i++){

if(i==n1){

for(int spaces=1; spaces<=i-1;spaces++){

System.out.print(" ");

}

System.out.println("\*");

}

else{

for(int spaces=1; spaces<=i-1;spaces++){

System.out.print(" ");

}

System.out.print("\*");

for(int spaces=1; spaces<=2\*(n1-i)-1;spaces++){

System.out.print(" ");

}

System.out.print("\*");

System.out.println();

}

}

for(int i=1; i<=n1-1; i++){

for(int spaces=1; spaces<=n1-i-1;spaces++){

System.out.print(" ");

}

System.out.print("\*");

for(int spaces=1; spaces<=2\*i-1;spaces++){

System.out.print(" ");

}

System.out.print("\*");

System.out.println();

}

}

}

Input: 5

Output:

\* \*

\* \*

\*

\* \*

\* \*

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Program -5: Grading of Annamalai University Students

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

int n = obj.nextInt();

if(n>=0){

if(n<50){

System.out.println("The Grade of Student is F");

}

else if(n<60){

System.out.println("The Grade of Student is E");

}

else if(n<70){

System.out.println("The Grade of Student is D");

}

else if(n<80){

System.out.println("The Grade of Student is C");

}

else if(n<90){

System.out.println("The Grade of Student is B");

}

else if(n<100){

System.out.println("The Grade of Student is A");

}

else if(n==100){

System.out.println("The Grade of Student is S");

}

else if(n>100){

System.out.println("Invalid input");

}

}

else{

System.out.println("Negative number is not a valid input");

}

}

}

Input: 62

Output: The Grade of Student is D

Input: -25

Output: Negative number is not a valid input

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Program-6: Write a program to calculate the hotel Tariff. Room rent is 20% higher during peak season(April - June, Nov-Dec)

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

int month = obj.nextInt();

int rent = obj.nextInt();

int days = obj.nextInt();

int totalPrice = rent\*days;

switch(month)

{

case 1: System.out.println(totalPrice); break;

case 2: System.out.println(totalPrice); break;

case 3: System.out.println(totalPrice); break;

case 4: System.out.println(1.2\*totalPrice); break;

case 5: System.out.println(1.2\*totalPrice); break;

case 6: System.out.println(1.2\*totalPrice); break;

case 7: System.out.println(totalPrice); break;

case 8: System.out.println(totalPrice); break;

case 9: System.out.println(totalPrice); break;

case 10: System.out.println(totalPrice); break;

case 11: System.out.println(1.2\*totalPrice); break;

case 12: System.out.println(1.2\*totalPrice); break;

}

}

}

Input; 3 1500 2

Output: 3000

Input: 6 1500 2

Output: 3600

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Program-7: Write a program to print The Largest number among given three numbers

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner obj = new Scanner(System.in);

int n1 = obj.nextInt();

int n2 = obj.nextInt();

int n3 = obj.nextInt();

if(n1>n2 && n1>n3)

{

System.out.println("The Largest number among "+n1+" "+n2+" "+n3+" is "+n1);

}

else if(n2 > n3)

{

System.out.println("The Largest number among "+n1+" "+n2+" "+n3+" is "+n2);

}

else

{

System.out.println("The Largest number among "+n1+" "+n2+" "+n3+" is "+n3);

}

}

}

Input: 6 9 2

Output: The Largest number among 6 9 2 is 9