**Main Method():**

public static void main (String[] args){

// Method 1

System.out.println("Power is: " + power(4, 5));

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

// Method 2

pattern();

//Mehtod 3

printLinearArray(array());

// Method 4

System.out.println("\n-----------------");

System.out.println("Concatenated String is: " + concat("good", " luck"));

// Method 5

sum\_average();

// Method 6

highest\_array();

// Method 7

min\_array();

// Method 8

telephone\_array();

// Method 10

System.out.println("--------------\nNew String is: " + replace\_Character());

// Method 11

email();

//Method 9

issues();

}

**Question1:**

// Question Number 1

public static double power(double num1, double num2){

double power = Math.pow(num1, num2);

return power;

}

**Question2:**

// Question Number 2

public static void pattern(){

for(int i = 0; i < 6; i++){

for(int j = 0; j < i; j++){

if(j == 0){

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

}

if(j > -1){

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

}

}

for(int k = 0; k < i; k++){

if(k == 0)

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

}

System.out.println();

}

}

**Question3:**

public static int[] array(){

System.out.println("-----------------\nEnter Values");

int even = 0;

int odd = 0;

int[] array = new int[5];

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

int user = input.nextInt();

if(user == 0){

continue;

}

else{

array[i] = user;

}

}

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

if(array[i] % 2 == 0){

even++;

}

else{

odd++;

}

}

System.out.println("Even numbers are: " + even);

System.out.println("Odd numbers are: " + odd);

return array;

}

**Question 4:**

public static String concat(String s1, String s2){

String join = s1 + s2;

return join;

}

**Question 5:**

public static void sum\_average(){

int[] array = {1, 2, 3, 4, 5};

int sum = 0;

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

sum+= array[i];

}

System.out.println("------------\nSum is: " + sum);

System.out.println("------------\nAverage is: " + sum/(array.length));

}

**Question 6:**

public static void highest\_array(){

int[] array = new int[5];

System.out.println("-------------\nEnter array elements: ");

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

int user = input.nextInt();

array[i] = user;

}

int max = array[0];

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

if(array[i] > max){

max = array[i];

}

}

System.out.println("-------------\nMax value of array is: " + max);

}

public static void min\_array(){

int[] array = new int[5];

System.out.println("-------------\nEnter array elements: ");

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

int user = input.nextInt();

array[i] = user;

}

int min = array[0];

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

if(array[i] < min){

min = array[i];

}

}

System.out.println("-------------\nMinimum value of array is: " + min);

}

**Question 7:**

public static void telephone\_array(){

int[] telephone\_Service = new int[10];

System.out.println("-------------\nEnter [1] for excellent service\nEnter [2] for good service\nEnter [3] for Average service\nEnter [4] for below average service\nEnter [5] for poor service");

int choice\_1 = 0;

int choice\_2 = 0;

int choice\_3 = 0;

int choice\_4 = 0;

int choice\_5 = 0;

for(int i = 0; i < telephone\_Service.length; i++){

int user = input.nextInt();

telephone\_Service[i] = user;

}

for(int i = 0; i < telephone\_Service.length; i++){

if(telephone\_Service[i] == 1){

choice\_1++;

}

else if(telephone\_Service[i] == 2){

choice\_2++;

}

else if(telephone\_Service[i] == 3){

choice\_3++;

}

else if(telephone\_Service[i] == 4){

choice\_4++;

}

else if(telephone\_Service[i] == 5){

choice\_5++;

}

}

System.out.println("-------------\n" + choice\_1 + " Users rated Excellent Service");

System.out.println(choice\_2 + " Users rated Good Service");

System.out.println(choice\_3 + " Users rated Average Service");

System.out.println(choice\_4 + " Users rated Below Average Service");

System.out.println(choice\_5 + " Users rated Poor Service");

}

**Question 8:**

public static void issues(){

String[] issues = {"Political", "Environmental", "Social", "Pollution", "Violence"};

int[][] display = new int[5][10];

System.out.println("------------------\nGive your Opinion");

System.out.println("Press [1] for Political");

System.out.println("Press [2] for Environmental");

System.out.println("Press [3] for Social");

System.out.println("Press [4] for Pollution");

System.out.println("Press [5] for Violence");

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

for(int j = 0; j < display[i].length; j++){

display[i][j] = input.nextInt();

}

}

int average = 0;

int choice\_1 = 0;

int choice\_2 = 0;

int choice\_3 = 0;

int choice\_4 = 0;

int choice\_5 = 0;

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

for(int j = 0; j < display[i].length; j++){

if(display[i][j] == 1){

choice\_1++;

}

else if(display[i][j] == 2){

choice\_2++;

}

else if(display[i][j] == 3){

choice\_3++;

}

else if(display[i][j] == 4){

choice\_4++;

}

else if(display[i][j] == 5){

choice\_5++;

}

}

}

average = (choice\_1 + choice\_2 + choice\_3 + choice\_4 + choice\_5) / 10;

//System.out.println("Average is: " + average);

if(choice\_1 > choice\_2 && choice\_1 > choice\_3 && choice\_1 > choice\_4 && choice\_1 > choice\_5){

System.out.println("Political is the higest issue: " + choice\_1 + " times");

}

if(choice\_2 > choice\_1 && choice\_2 > choice\_3 && choice\_2 > choice\_4 && choice\_2 > choice\_5){

System.out.println("Environmental is the higest issue: " + choice\_2 + " times");

}

if(choice\_3 > choice\_1 && choice\_3 > choice\_2 && choice\_3 > choice\_4 && choice\_3 > choice\_5){

System.out.println("Social is the higest issue: " + choice\_3 + " times");

}

if(choice\_4 > choice\_1 && choice\_4 > choice\_2 && choice\_4 > choice\_3 && choice\_4 > choice\_5){

System.out.println("Pollution is the higest issue: " + choice\_4 + " times");

}

if(choice\_5 > choice\_1 && choice\_5 > choice\_2 && choice\_5 > choice\_3 && choice\_5 > choice\_4){

System.out.println("Violence is the higest issue: " + choice\_5 + " times");

}

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

if(choice\_1 < choice\_2 && choice\_1 < choice\_3 && choice\_1 < choice\_4 && choice\_1 < choice\_5){

System.out.println("Political is the lowest issue: " + choice\_1 + " times");

}

if(choice\_2 < choice\_1 && choice\_2 < choice\_3 && choice\_2 < choice\_4 && choice\_2 < choice\_5){

System.out.println("Environmental is the lowest issue: " + choice\_2 + " times");

}

if(choice\_3 < choice\_1 && choice\_3 < choice\_2 && choice\_3 < choice\_4 && choice\_3 < choice\_5){

System.out.println("Social is the lowest issue: " + choice\_3 + " times");

}

if(choice\_4 < choice\_1 && choice\_4 < choice\_2 && choice\_4 < choice\_3 && choice\_4 < choice\_5){

System.out.println("Pollution is the lowest issue: " + choice\_4 + " times");

}

if(choice\_5 < choice\_1 && choice\_5 < choice\_2 && choice\_5 < choice\_3 && choice\_5 < choice\_4){

System.out.println("Violence is the lowest issue: " + choice\_5 + " times");

}

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

if(average == 1){

System.out.println("Political is the average issue: " + average + " times");

}

if(average == 2){

System.out.println("Environmental is the average issue: " + average + " times");

}

if(average == 3){

System.out.println("Social is the average issue: " + average + " times");

}

if(average == 4){

System.out.println("Pollution is the average issue: " + average + " times");

}

if(average == 5){

System.out.println("Violence is the average issue: " + average + " times");

}

}

**Question 9:**

public static String replace\_Character(){

String string = "WelcTme tT TutTrialspTint.cTm";

String new\_String = string.replace("T","O");

return new\_String;

}

**Question 10:**

public static void email(){

System.out.println("Enter your email address");

String string = input.next();

String username = string.substring(0, string.indexOf("@"));

System.out.println("-------------\nUsername is: " + username);

}