

String

Task1

Write a Java program that will takes a String as an input from the user

- A. Will print the string in reverse order with while loop only
- B. Will print the string in reverse order with food loop only
- C. It will also take a number as an input and will reverse print the later part of that string from that number.
- D. It will also take a character as an input and will reverse print the string till that character **sc.next().charAt(0) - use this to take char input.**

Sample Case A and B:	Sample Case B:	Sample Case C:
Prompt: Please enter a string: Input: My name is A	Prompt: Please enter a string: Input: Hello World Prompt: Please enter a Number: Input2: 3	Prompt: Please enter a string: Input: Hello World Prompt: Please enter a Character: Input: o
Sample Output: A si eman yM	Sample Output: dlrow o	Sample Output: W olleH

Task2

Write a Java program that will takes a String as an input from the user

- A. It will also take a character as input and find out if the character is in the string or not.
- B. If the character is found replace all those characters with X and print the string.

Sample Case A:	Sample Case B:
Prompt: Please enter a string: Input: Hello World Prompt: Please enter a Character: Input: o	Prompt: Please enter a string: Input: Hello World Prompt: Please enter a Character: Input: o

Sample Output: Yes	Sample Output: HellX WXRld

Task3

Write a program that will take two strings from the user and will give an output of two string selecting one from all the even position characters of that string and the other from selecting all the odd position characters of that string.

Sample Case A:
Prompt: Please enter a string: Input: Hello World
Sample Output: String1 = HloWrld String2= el ol

Task4

Write a program that will take a string from the user and will create and display a new string by removing all the duplicate characters from that string. (Keep in mind that Uppercase and lowercase are not the same or duplicate characters.)

Sample Case A:
Prompt: Please enter a string: Input: AAbbCCddEe
Sample Output: AbCdEe

Task5

Write a program that will take a string from the user and will also take an index number or a character. Based on that index number or character the program will split the string into two new different strings. (Note: if there are duplicate characters of the character which the user selected to split the string then consider the first one found in the string)

Sample Case A:	Sample Case B:
Prompt: Please enter a string: Input: My Name is K Prompt: Please enter an index number or character to split the string: Input: 4	Prompt: Please enter a string: Input: My Name Ns K Prompt: Please enter an index number or character to split the string: Input: N
Sample Output: String1 = My Na String2 = me is K	Sample Output: String1 = My N String2 = ame Ns K

Task6

Write a Java program that will ask the user to insert a string as an input. It can be safely assumed that the string will only have a combination of uppercase and lowercase letters. The program should be designed in such a way that it will hand pick each and every uppercase letter and will allocate them in the last of that string sequentially. Another priority of the program should be that it will not leave any gaps(spaces) in the final string.

Hint: UpperCase Letters ASCII range 65 - 90
 LowerCase Letters ASCII range 97 - 122

Sample Case A:	Sample Case B:
Prompt: Please enter a string: Input: My name is A	Prompt: Please enter a string: Input2: Hello World
Sample Output: MAnameis	Sample Output: HWelloorld

Task7

1	public class Task7
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	int i = 5, j = 0, k = 15;
7	while (i < 10){
8	k-=1;
9	j = k;
10	while (j > 10){
11	if (j % 2 == 0){
12	test = "<--";
13	test = test + i + 2 + "-->" + (j / 2);
14	}else{
15	test = "-->";
16	test = "-->" + (i / 2) + test + j;
17	}
18	System.out.println(test);
19	--j;
20	}
21	i++;
22	}
23	}
24	}

Task8

1	public class Task8
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	int i = 2, j = 0, k = 18;
7	while (i < 7){
8	test = "-->";
9	j = --k;
10	while (j > 13){
11	test = test + i + j;
12	System.out.println(test);
13	j--;
14	}
15	i++;
16	}
17	}

1	public class Task8
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	int i = 2, j = 0, k = 18;
7	while (i < 7){
8	test = "-->";
9	j = --k;
10	while (j > 13){
11	test = test + i + j;
12	System.out.println(test);
13	j--;
14	}
15	i++;
18	}

Task9

1	public class Task5
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	int i = 2, j = 0, k = 17;
7	test = "-->Summer";
8	while (i < 7){
9	k-=1;
10	j = k;
11	while (j > 12){
12	if (j % 2 == 0){
13	test += "<--";
14	test = test + i + (j / 2);
15	}else{
16	test += "-->";
17	test = test + (i / 2) + j;
18	}
19	System.out.println(test);
20	if (j == 14){
21	test = "-->Winter";
22	}
23	--j;
24	}
25	i++;

26	}
27	}
28	}

Array

Task1

Write a java program that reads the length of the array then will get that many numbers from the user and will store the numbers in an array and will find the maximum number among them. (There can be duplicate values of numbers in the array)

Sample Case A:	Sample Case B:
Prompt: Please enter the length of the array: Input: 5 Input of array elements: 10, 50 ,30 ,40, 4	Prompt: Please enter the length of the array: Input: 5 Input of array elements: 10, 50 ,50 ,50, 4
Sample Output: 50	Sample Output: 50

Task2

Write a java program that reads the length of the array then will get that many numbers from the user and will store the numbers in an array and will find the minimum number among them. (There can be duplicate values of numbers in the array)

Sample Case A:	Sample Case B:
Prompt: Please enter the length of the array: Input: 5 Input of array elements: 10, 50 ,30 ,40, 4	Prompt: Please enter the length of the array: Input: 5 Input of array elements: 10, 4 ,50 ,50, 4
Sample Output: 4	Sample Output: 4

Task3

Write a java program that reads the length of the array then will get that many numbers(positive and negative) from the user and will store the numbers in an array and will create two new arrays having half of the length as the main one, and will put all the positive numbers in the first array and all the negative number in the second array . (There can be duplicate values of numbers in the array)

Sample Case A:

Prompt: Please enter the length of the array:

Input: 5

Input of array elements: 8, -10, -5, 2, 3

Sample Output:

Array1 = 8, 2, 3

Array2 = -10, -5

Task4

Write a java program that reads the length of the array then will get that many numbers from the user and will store the numbers in an array and will create two new arrays having half of the length as the main one, and will put all the odd numbers in the first array and all the even number in the second array . (There can be duplicate values of numbers in the array)

Sample Case A:

Prompt: Please enter the length of the array:

Input: 5

Input of array elements: 5, 10, 2, 3, 9

Sample Output:

Array1 = 5, 3, 9

Array2 = 10, 2

Task5

Write a java program that reads the length of the array then will get that many numbers from the user and will store the numbers in an array. Then, sort the array in **ascending** order using **Bubble Sort** technique, and print it.

Sample Case A:

Prompt: Please enter the length of the array:

Input: 5

Input of array elements: 5, 10, 2, 3, 9

Sample Output: 2, 3, 5, 9, 10

Task6

1	public class task6 {
2	public static void main(String args[]){
3	String [] myArray = {"+", "-", "/", "*", "%", "#"};
4	int index1 = 0, index2 =0;
5	index1 = 1;
6	while (index1 < 6){
7	myArray[index1]+=index1 + 1;
8	index2 = 1;
9	while (index2 < index1){
10	myArray[index1] = index2%2 + myArray[index1];
11	index2 = index2 + 1;
12	}
13	System.out.println(myArray[index2]);
14	index1 = index1 + 1;
15	}
16	}
17	}

Task7

1	public class task7{
2	public static void main(String args[]){

3	int [] myArray = new int[10];
4	int [] b = {5,10,30,40,85};
5	int index1 = 0, index2 =0;
6	index1 = 1;
7	b = myArray;
8	while (index1 < 10){
9	myArray[index1] = index1 + 4;
10	index2 = 1;
11	while (index2 < index1){
12	myArray[index1] = b[index1] - myArray[index2] + index1;
13	index2 = index2 + 1;
14	}
15	System.out.println(myArray[index1]);
16	index1 = index1 + 1;
17	}
18	}
19	}

Task8

1	Public class task8{
2	public static void main(String args[]) {
3	int [] a = {0,0,0,0,0,0,0};
4	int [] b = new int [7];
5	int idx1 = 0, idx2 = 0;
6	a = b;
7	while (idx1 < 5){
8	a[idx1] = idx1 + 15;
9	idx2 = 1;
10	while (idx2 < idx1){
11	a[idx1] = b[idx2 - 1] + a[idx2] + idx1;
12	idx2 = idx2 + 1;
13	}
14	System.out.println(a[idx2]);
15	idx1 = idx1 + 1;
16	}
17	}
18	}