**CODING SKILL – JAVA**

1. **GREATEST OF 3 NUMBERS**

public class Main

{

public static void main (String[]args)

{

int num1 = 10, num2 = 20, num3 = 30;

if (num1 >= num2 && num1 >= num3)

System.out.println (num1 + " is the greatest");

else if (num2 >= num1 && num2 >= num3)

System.out.println (num2 + " is the greatest");

else if (num3 >= num1 && num3 >= num2)

System.out.println (num3 + " is the greatest");

}

}

**OUTPUT:**

30 is the greatest

1. **SMALLEST OF 3 NUMBERS**

import java.util.Scanner;

public class SmallestNumberExample1

{

public static void main(String[] args)

{

int a, b, c, smallest, temp;

//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();

//comparing a and b and storing the smallest number in a temp variable

temp=a<b?a:b;

//comparing the temp variable with c and storing the result in the variable names smallest

smallest=c<temp?c:temp;

//prints the smallest number

System.out.println("The smallest number is: "+smallest);

}

}

**OUTPUT:**

Enter the first number:

23

Enter the second number:

11

Enter the third number:

67

The smallest Number is: 11

1. **PERFORM SWAPPING OF 2 NUMBERS**

// using temp variable

// Importing generic libraries

import java.util.\*;

class GFG {

// Function to swap two numbers

// Using temporary variable

static void swapValuesUsingThirdVariable(int m, int n)

{

// Swapping the values

int temp = m;

m = n;

n = temp;

System.out.println("Value of m is " + m

+ " and Value of n is " + n);

}

// Main driver code

public static void main(String[] args)

{

// Random integer values

int m = 9, n = 5;

// Calling above function to

// reverse the numbers

swapValuesUsingThirdVariable(m, n);

}

}

**OUTPUT:**

Value of m is 5 and Value of n is 9

1. **PRINT NUMBERS IN ASCENDING ORDER**

public class PrintNumbers {

public static void main(String[] args) {

int[] numbers = {5, 3, 8, 1, 2, 7, 4, 6}; // Example array of numbers

// Sort the numbers in ascending order

for (int i = 0; i < numbers.length - 1; i++) {

for (int j = 0; j < numbers.length - 1 - i; j++) {

if (numbers[j] > numbers[j + 1]) {

// Swap numbers[j] and numbers[j + 1]

int temp = numbers[j];

numbers[j] = numbers[j + 1];

numbers[j + 1] = temp;

}

}

}

// Print the sorted numbers

System.out.println("Numbers in ascending order:");

for (int number : numbers) {

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

}

}

}

**OUTPUT:**

Numbers in ascending order:

1 2 3 4 5 6 7 8

1. **PRINT NUMBERS IN DESCENDING ORDER**

public class PrintNumbersDescending {

public static void main(String[] args) {

int[] numbers = {5, 3, 8, 1, 2, 7, 4, 6}; // Example array of numbers

// Sort the numbers in descending order

for (int i = 0; i < numbers.length - 1; i++) {

for (int j = 0; j < numbers.length - 1 - i; j++) {

if (numbers[j] < numbers[j + 1]) {

// Swap numbers[j] and numbers[j + 1]

int temp = numbers[j];

numbers[j] = numbers[j + 1];

numbers[j + 1] = temp;

}

}

}

// Print the sorted numbers

System.out.println("Numbers in descending order:");

for (int number : numbers) {

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

}

}

}

**OUTPUT:**

Numbers in descending order:

8 7 6 5 4 3 2 1

1. **PRINT ODD NUMBERS AND THEIR COUNT**

public class PrintOddNumbers {

public static void main(String[] args) {

int[] numbers = {5, 3, 8, 1, 2, 7, 4, 6}; // Example array of numbers

int count = 0; // Initialize count for odd numbers

// Print odd numbers and count them

System.out.println("Odd numbers:");

for (int number : numbers) {

if (number % 2 != 0) {

System.out.println(number);

count++;

}

}

// Print the count of odd numbers

System.out.println("Count of odd numbers: " + count);

}

}

**OUTPUT:**

Odd numbers:

5

3

1

7

Count of odd numbers: 4

1. **PRINT EVEN NUMBERS AND THEIR COUNT**

public class PrintEvenNumbers {

public static void main(String[] args) {

int[] numbers = {5, 3, 8, 1, 2, 7, 4, 6}; // Example array of numbers

int count = 0; // Initialize count for even numbers

// Print even numbers and count them

System.out.println("Even numbers:");

for (int number : numbers) {

if (number % 2 == 0) {

System.out.println(number);

count++;

}

}

// Print the count of even numbers

System.out.println("Count of even numbers: " + count);

}

}

**OUTPUT:**

Even numbers:

8

2

4

6

Count of even numbers: 4

1. **PRINT 1ST 100 ODD NUMBER**

public class PrintFirst100OddNumbers {

public static void main(String[] args) {

int count = 0; // Initialize count for the number of odd numbers printed

int number = 1; // Start with the first odd number

System.out.println("First 100 odd numbers:");

// Loop until count reaches 100

while (count < 100) {

// Check if the number is odd

if (number % 2 != 0) {

System.out.println(number);

count++;

}

// Move to the next number

number += 2;

}

}

}

**OUTPUT:**

First 100 odd numbers:

1

3

5

.

.

.

195

197

199

1. **PRINT 1ST 100 EVEN NUMBER**

public class PrintFirst100EvenNumbers {

public static void main(String[] args) {

int count = 0; // Initialize count for the number of even numbers printed

int number = 2; // Start with the first even number

System.out.println("First 100 even numbers:");

// Loop until count reaches 100

while (count < 100) {

// Check if the number is even

if (number % 2 == 0) {

System.out.println(number);

count++;

}

// Move to the next even number

number += 2;

}

}

}

**OUTPUT:**

First 100 even numbers:

2

4

6

.

.

.

196

198

200

1. **PRINT MULTIPLES OF 3 FROM 1 TO 100**

public class PrintMultiplesOfThree {

public static void main(String[] args) {

System.out.println("Multiples of 3 from 1 to 100:");

for (int i = 1; i <= 100; i++) {

if (i % 3 == 0) {

System.out.println(i);

}

}

}

}

**OUTPUT:**

Multiples of 3 from 1 to 100:

3

6

9

.

.

.

93

96

99

1. **PRINT 1-100 DIVISIBLE BY BOTH 2 AND 3**

public class PrintDivisibleByTwoAndThree {

public static void main(String[] args) {

System.out.println("Numbers from 1 to 100 divisible by both 2 and 3:");

for (int i = 1; i <= 100; i++) {

if (i % 2 == 0 && i % 3 == 0) {

System.out.println(i);

}

}

}

}

**OUTPUT:**

Numbers from 1 to 100 divisible by both 2 and 3:

6

12

18

24

30

36

42

48

54

60

66

72

78

84

90

96

1. **PRINT TOTAL OF FIRST 100 NUMBERS**

public class SumOfFirst100Numbers {

public static void main(String[] args) {

int sum = 0;

// Calculate the sum of the first 100 numbers

for (int i = 1; i <= 100; i++) {

sum += i;

}

// Print the sum

System.out.println("The sum of the first 100 numbers is: " + sum);

}

}

**OUTPUT:**

The sum of the first 100 numbers is: 5050

1. **MULTIPLY FIRST 100 NUMBERS**

import java.math.BigInteger;

public class ProductOfFirst100Numbers {

public static void main(String[] args) {

// Initialize a BigInteger to handle large numbers

BigInteger product = BigInteger.ONE;

// Calculate the product of the first 100 numbers

for (int i = 1; i <= 100; i++) {

product = product.multiply(BigInteger.valueOf(i));

}

// Print the product

System.out.println("The product of the first 100 numbers is: " + product);

}

}

**OUTPUT:**

The product of the first 100 numbers is: 93326215443944152681699238856266700490715968264381621468592963895217599993229915608941463976156518286253697920827223758251185210916864000000000000000000000000

1. **PRINT ANY MULTIPLICATION TABLE**

public class MultiplicationTable {

public static void main(String[] args) {

int number = 7; // The number whose multiplication table we want to print

System.out.println("Multiplication table for " + number + ":");

// Print the multiplication table

for (int i = 1; i <= 10; i++) {

System.out.println(number + " x " + i + " = " + (number \* i));

}

}

}

**OUTPUT:**

Multiplication table for 7:

7 x 1 = 7

7 x 2 = 14

7 x 3 = 21

7 x 4 = 28

7 x 5 = 35

7 x 6 = 42

7 x 7 = 49

7 x 8 = 56

7 x 9 = 63

7 x 10 = 70

1. **PRINT NUMBERS 1 TO 4 USING BREAK**

public class PrintNumbersWithBreak {

public static void main(String[] args) {

for (int i = 1; i <= 10; i++) {

System.out.println(i);

if (i == 4) {

break;

}

}

}

}

**OUTPUT:**

1

2

3

4

1. **PRINT NUMBERS 1 TO 10 EXCEPT 5 USING CONTINUE**

public class PrintNumbersWithContinue {

public static void main(String[] args) {

for (int i = 1; i <= 10; i++) {

if (i == 5) {

continue;

}

System.out.println(i);

}

}

}

**OUTPUT:**

1

2

3

4

6

7

8

9

10

1. **PRINT LAST DIGIT OF A GIVEN NUMBER**

import java.util.Scanner;

public class LastDigit {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Prompt the user to enter a number

System.out.print("Enter a number: ");

int number = scanner.nextInt();

// Calculate the last digit of the number using the modulo operator

int lastDigit = number % 10;

// Print the last digit

System.out.println("The last digit of the number is: " + lastDigit);

scanner.close();

}

}

**OUTPUT:**

Enter a number: 456

The last digit of the number is: 6

1. **PRINT SECOND LAST DIGIT OF A GIVEN NUMBER**

import java.util.Scanner;

public class SecondLastDigit {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Prompt the user to enter a number

System.out.print("Enter a number: ");

int number = scanner.nextInt();

// Divide the number by 10 to remove the last digit, then use modulo to get the second last digit

int secondLastDigit = (number / 10) % 10;

// Print the second last digit

System.out.println("The second last digit of the number is: " + secondLastDigit);

scanner.close();

}

}

**OUTPUT:**

Enter a number: 456

The second last digit of the number is: 5

1. **PRINTING FIBONACCI NUMBER**

class Fibonacci

{

public static void main(String args[])

{

int n1=0,n2=1,n3,i,count=10;

System.out.print(n1+" "+n2);//printing 0 and 1

for(i=2;i<count;++i)//loop starts from 2 because 0 and 1 are already printed

{

n3=n1+n2;

System.out.print(" "+n3);

n1=n2;

n2=n3;

}

}

**OUTPUT:**

0 1 1 2 3 5 8 13 21 34

1. **PRINTING FACTORIAL NUMBER**

class Factorial

{

static int factorial(int n)

{

if (n == 0)

return 1;

else

return(n \* factorial(n-1));

}

public static void main(String args[])

{

int i,fact=1;

int number=4;

fact = factorial(number);

System.out.println("Factorial of "+number+" is: "+fact);

}

}

**OUTPUT:**

Factorial of 4 is: 24

1. **PRINTING PRIME NUMBERS**

public class prime

{

public static void main(String[] args)

{

int n,i,count=0;

n=5;

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

{

if(n%i==0)

count++;

}

if(count==2)

System.out.print("Its prime");

else

System.out.print("Not a prime");

}

}

**OUTPUT:**

Its prime

1. **PRINTING PALINDROME NUMBERS**

import java.util.\*;

class Palindrome

{

public static void main(String args[])

{

String original, reverse = "";

Scanner in = new Scanner(System.in);

System.out.println("Enter a string/number to check if it is a palindrome");

original = in.nextLine();

int length = original.length();

for ( int i = length - 1; i >= 0; i-- )

reverse = reverse + original.charAt(i);

if (original.equals(reverse))

System.out.println("Entered string/number is a palindrome.");

else

System.out.println("Entered string/number isn't a palindrome.");

}

}

**OUTPUT:**

Enter a string/number to check if it is a palindrome

level

Entered string/number is a palindrome.

1. **PRINTING ARMSTRONG NUMBERS**

public class ArmstrongNumbers {

public static void main(String[] args) {

int lowerLimit = 1;

int upperLimit = 1000;

System.out.println("Armstrong numbers between " + lowerLimit + " and " + upperLimit + ":");

for (int i = lowerLimit; i <= upperLimit; i++) {

if (isArmstrong(i)) {

System.out.println(i);

}

}

}

public static boolean isArmstrong(int num) {

int originalNum = num;

int numOfDigits = String.valueOf(num).length();

int sum = 0;

while (num != 0) {

int digit = num % 10;

sum += Math.pow(digit, numOfDigits);

num /= 10;

}

return sum == originalNum;

}

}

**OUTPUT:**

Armstrong numbers between 1 and 1000:

1

2

3

4

5

6

7

8

9

153

370

371

407

1. **REVERSE A NUMBER IN JAVA**

public class ReverseNumber

{

public static void main(String[] args)

{

int number = 987654, 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);

}

}

**OUTPUT:**

The reverse of the given number is: 456789

1. **PRINTING ASCII VALUES FROM A TO Z**

public class AsciiValuesAZ {

public static void main(String[] args) {

System.out.println("ASCII values from A to Z:");

for (char ch = 'A'; ch <= 'Z'; ch++) {

int asciiValue = (int) ch;

System.out.println(ch + ": " + asciiValue);

}

}

}

**OUTPUT:**

ASCII values from A to Z:

A: 65

B: 66

C: 67

D: 68

E: 69

F: 70

G: 71

H: 72

I: 73

J: 74

K: 75

L: 76

M: 77

N: 78

O: 79

P: 80

Q: 81

R: 82

S: 83

T: 84

U: 85

V: 86

W: 87

X: 88

Y: 89

Z: 90

1. **COUNT THE NUMBER OF DIGITS IN A NUMBER**

import java.util.Scanner;

public class CountDigits {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter a number: ");

int number = scanner.nextInt();

int count = 0;

int temp = number;

while (temp != 0) {

temp /= 10;

count++;

}

System.out.println("Number of digits in the number: " + count);

scanner.close();

}

}

**OUTPUT:**

Enter a number: 123456

Number of digits in the number: 6

1. **SUM THE DIGITS OF A NUMBER**

import java.util.Scanner;

public class SumOfDigits

{

public static void main(String args[])

{

int number, digit, sum = 0;

Scanner sc = new Scanner(System.in);

System.out.print("Enter the number: ");

number = sc.nextInt();

while(number > 0)

{

digit = number % 10;

sum = sum + digit;

number = number / 10;

}

System.out.println("Sum of Digits: "+sum);

}

}

**OUTPUT:**

Enter the number: 12345

Sum of Digits: 15

1. **REVERSE A NUMBER**

import java.util.Scanner;

public class Characterdemo

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

System.out.print("Input a character: ");

// reading a character

char c = sc.next().charAt(0);

//prints the character

System.out.println("You have entered "+c);

}

}

**OUTPUT:**

Input a character: A

You have entered A

1. **ACCEPT AN INTEGER AND COUNT THE FACTORS OF THE NUMBER**

import java.util.Scanner;

public class CountFactors {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter an integer: ");

int number = scanner.nextInt();

int countFactors = 0;

System.out.print("Factors of " + number + ": ");

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

if (number % i == 0) {

countFactors++;

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

}

}

System.out.println("\nNumber of factors: " + countFactors);

scanner.close();

}

}

**OUTPUT:**

Enter an integer: 12

Factors of 12: 1 2 3 4 6 12

Number of factors: 6