Java Beginner Programming Tutorials

5. Variables

**public** **class** test {

**public** **static** **void** main(String [] args){

**double** tuna;

tuna = 5.28;

System.***out***.println("I want ");

System.***out***.println(tuna);

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

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

}

}

6. Getting User Input

**import** java.util.Scanner;

**public** **class** test {

**public** **static** **void** main(String [] args){

Scanner bucky = **new** Scanner(System.***in***);

System.***out***.print(bucky.nextLine());

}

}

7. Building a Basic Calculator

**import** java.util.Scanner;

**public** **class** test {

**public** **static** **void** main(String [] args){

Scanner bucky = **new** Scanner(System.***in***);

**double** fnum, snum, answer;

System.***out***.print("Enter the first num: ");

fnum = bucky.nextDouble();

System.***out***.print("Enter the second num: ");

snum = bucky.nextDouble();

answer = fnum + snum;

System.***out***.print(answer);

}

}

8. Math Operators

**import** java.util.Scanner;

**public** **class** test {

**public** **static** **void** main(String [] args){

Scanner bucky = **new** Scanner(System.***in***);

**int** girls, boys, people;

girls = 7;

boys = 3;

people = girls % boys;

System.***out***.println(people);

}

}

9. Increment Operators

**import** java.util.Scanner;

**public** **class** test {

**public** **static** **void** main(String [] args){

Scanner bucky = **new** Scanner(System.***in***);

**int** tuna = 5;

**int** bass = 18;

tuna +=8;

System.***out***.println(tuna);

}

}

10. If Statement

**public** **class** test {

**public** **static** **void** main(String [] args){

**int** test = 6;

**if** (test<9){

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

}**else**{

System.***out***.println("This is else");

}

}

}

11. Logical Operators

**class** test{

**public** **static** **void** main (String args []){

**int** boy, girl;

boy = 18;

girl = 40;

**if** (boy > 10 && girl < 60){

System.***out***.println("You can enter.");

}**else**{

System.***out***.println("You cannot enter.");

}

}

}

12. Switch Statement

**class** test{

**public** **static** **void** main (String args []){

**int** age;

age = 10;

**switch** (age){

**case** 1:

System.***out***.println("You can crawl");

**break**;

**case** 2:

System.***out***.println("You can talk");

**break**;

**case** 3:

System.***out***.println("You can get in trouble");

**break**;

**default**:

System.***out***.println("I don't know how old you are");

**break**;

}

}

}

13. While Loop

**class** test{

**public** **static** **void** main (String args[]){

**int** counter = 0;

**while**(counter<10){

System.***out***.println(counter);

counter++;

}

}

}

14. Using Multiple Classes

**class** test{

**public** **static** **void** main (String args[]){

tuna tunaObject = **new** tuna();

tunaObject.simpleMessage();

}

}

**public** **class** tuna {

**public** **void** simpleMessage(){

System.***out***.println("This is anther class");

}

}

15. Using Methods with Parameters

**class** test{

**public** **static** **void** main (String args[]){

Scanner input = **new** Scanner(System.***in***);

tuna tunaObject = **new** tuna();

System.***out***.println("Enter your name here: ");

String name = input.nextLine();

tunaObject.simpleMessage(name);

}

}

**public** **class** tuna {

**public** **void** simpleMessage(String name){

System.***out***.println("Hello " + name);

}

}

16. Many Methods and Instances

**public** **class** tuna {

**private** String girlName;

**public** **void** setName(String name){

girlName = name;

}

**public** String getName(){

**return** girlName;

}

**public** **void** saying(){

System.***out***.printf("Your first girlfriend was %s ", getName());

}

}

**import** java.util.Scanner;

**class** test{

**public** **static** **void** main (String args[]){

Scanner input = **new** Scanner(System.***in***);

tuna tunaObject = **new** tuna();

System.***out***.println("Enter the name of first girlfriend name here: ");

String temp = input.nextLine();

tunaObject.setName(temp);

tunaObject.saying();

}

}

17. Constructors

**class** test{

**public** **static** **void** main (String args[]){

tuna tunaObject = **new** tuna("Kelsey");

tuna tunaObject2 = **new** tuna("Nicole");

tunaObject.saying();

tunaObject2.saying();

}

}

**public** **class** tuna {

**private** String girlName;

**public** tuna (String name){

girlName = name;

}

**public** **void** setName(String name){

girlName = name;

}

**public** String getName(){

**return** girlName;

}

**public** **void** saying(){

System.***out***.printf("Your first girlfriend was %s\n", getName());

}

}

18. Nested if Statements

**class** test{

**public** **static** **void** main (String args[]){

**int** age = 60;

**if**(age<50){

System.***out***.println("Your are young");

}**else**{

System.***out***.println("Your are old");

**if** (age>75){

System.***out***.println("Your are really old");

}**else**{

System.***out***.println("Don't worry. You are fine.");

}

}

}

}

19. Else If Statement

**class** test{

**public** **static** **void** main (String args[]){

**int** age = 45;

**if**(age >= 60)

System.out.println("Your are a senior citizen.");

**else** **if** (age >= 50){

System.out.print("You are in your 50s.");

**else** **if** (age >= 40){

System.out.print("You are in your 40s.");

**else**

System.out.println("Your are a young buck.");

}

}

20. Conditional Operators

**class** test{

**public** **static** **void** main (String args[]){

**int** age = 21;

System.***out***.println(age > 50 ? "You are old.":"You are young.");

}

}

21. Simple Averaging Program

**import** java.util.Scanner;

**class** test{

**public** **static** **void** main (String args[]){

Scanner input = **new** Scanner(System.***in***);

**int** total = 0;

**int** grade;

**int** average;

**int** counter = 0;

**while**(counter<10){

grade = input.nextInt();

total = total + grade;

counter++;

}

average = total/10;

System.***out***.println("Your average is: " + average);

}

}

22. For Loops

**class** test{

**public** **static** **void** main (String args[]){

**for**(**int** counter = 1; counter <= 10; counter+=3){

System.***out***.println(counter);

}

}

}

23. Compound Interest Program

**class** test{

**public** **static** **void** main (String args[]){

**double** amount;

**double** principal = 10000;

**double** rate = .01;

**for**(**int** day = 1;day <= 20; day ++){

amount = principal\*Math.*pow*(1+rate, day);

System.***out***.println(day + " " + amount);

}

}

}

24. Do While Loop

**class** test{

**public** **static** **void** main (String args[]){

**int** counter = 0;

**do**{

System.***out***.println(counter);

counter++;

}**while**(counter <= 10);

}

}

25. Math Class Methods

**class** test{

**public** **static** **void** main (String args[]){

System.***out***.println(Math.*sqrt*(9));

}

}

26. Random Number Generator

**import** java.util.Random;

**class** test{

**public** **static** **void** main (String args[]){

Random dice = **new** Random();

**int** number;

**for** (**int** counter = 1; counter <= 10; counter++){

number = 1 + dice.nextInt(6);

System.***out***.println(number + " ");

}

}

}

27. Introduction to Arrays

**class** test{

**public** **static** **void** main (String args[]){

**int** maggie[] = {2, 4, 6, 8, 10, 12, 14, 16, 18, 20};

System.***out***.println(maggie[9]);

}

}

28. Creating an Array Table

**class** test{

**public** **static** **void** main (String args[]){

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

**int** maggie[] = {32, 18, 26, 58, 13, 12, 5};

**for** (**int** counter = 0; counter<maggie.length;counter++);{

System.***out***.println(counter + "\t" + maggie[counter]);

}

}

}

29. Summing Elements of Arrays

**public** **static** **void** main (String args[]){

**int** bucky[] = {21, 16, 86, 21, 3};

**int** sum = 0;

**for**(**int** counter = 0; counter<bucky.length; counter++){

sum+= bucky[counter];

}

System.***out***.println("The sum of these number is: " + sum);

}

}

30. Array Elements as Counters

**import** java.util.Random;

**class** test{

**public** **static** **void** main (String args[]){

Random rand = **new** Random();

**int** freq[] = **new** **int**[7];

**for** (**int** roll = 1; roll<1000; roll++){

++freq[1+rand.nextInt(6)];

}

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

**for** (**int** face = 1; face<freq.length; face++){

System.***out***.println(face+"\t"+freq[face]);

}

}

}

31. Enhanced For Loop

**import** java.util.Random;

**class** test{

**public** **static** **void** main (String args[]){

**int** bucky[] = {3, 4, 5, 6, 7};

**int** total = 0;

**for**(**int** x: bucky){

total += x;

}

System.***out***.println(total);

}

}

32. Arrays in Methods

**class** test{

**public** **static** **void** main (String args[]){

**int** bucky[] = {3, 4, 5, 6, 7};

*change*(bucky);

**for** (**int** y:bucky){

System.***out***.println(y);

}

}

**public** **static** **void** change(**int** x[]){

**for** (**int** counter = 0; counter<x.length; counter++){

x[counter]+=5;

}

}

}

33. Multidimensional Arrays

**class** test{

**public** **static** **void** main (String args[]){

**int** firstarray[][] = {{8, 9, 10, 11}, {12, 13, 14, 15}};

**int** secoondarray[][] = {{30, 31, 32, 33}, {43}, {4, 5, 6}}

}

}

34. Table for Multi Arrays

**class** test{

**public** **static** **void** main (String args[]){

**int** firstarray[][] = {{8, 9, 10, 11}, {12, 13, 14, 15}};

**int** secoondarray[][] = {{30, 31, 32, 33}, {43}, {4, 5, 6}};

System.***out***.println("This is the first array");

*display*(firstarray);

System.***out***.println("This is the second array");

*display*(firstarray);

}

**public** **static** **void** display(**int** x[][]){

**for** (**int** row = 0; row < x.length; row++){

**for** (**int** column = 0; column < x[row].length; column++){

System.***out***.print(x[row][column] + "\t");

}

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

}

}

}

35. Variable Length Arguments

**class** test{

**public** **static** **void** main (String args[]){

System.***out***.println(*average*(43, 56, 76, 98));

}

**public** **static** **int** average(**int**...numbers){

**int** total = 0;

**for** (**int** x:numbers)

total+=x;

**return** total/numbers.length;

}

}

36. Time Class

37. Display Regular Time

38. Public, Private and This

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81. Reading from Files

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