SECTION 1

Snippet 1

Infinite loop of counting numbers are causing due to the the decrement operator which is eventually taking the counting towards the negative where there is stopping conditions where as we have I < 10 in positive .

public class main {

public static void main(String[] args) {

for (int i = 0; i < 10; i++) {

System.out.println(i);

}

}

}

Snippet 2

Error is causing due to the ‘=’ operator which was placed instead of ‘ == ‘ operator

public class main {

public static void main(String[] args) {

int count = 5;

while (count == 0 ) {

System.out.println(count);

count--;

}

}

}

Snippet 3

Infinite loop is executing due to the syntax in while condition (num >0) so it needs to be reconfigured and set some bound to stop .

public class main {

public static void main(String[] args) {

int num = 0;

do {

System.out.println(num);

num++;

} while (10 > num );

}

}

Snippet 4

It was iterating till 10 cause of the ‘<=’ operator which was supposed to be ‘<’

public class main {

public static void main(String[] args) {

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

System.out.println(i);

}

}

}

Snippet 5

It is not possible that we are assigning the value as 10 and condition as greater than 0 so it is necessary to replace the for loop with for ( int I = 0 ; I < 12 ; I ++ )

public class main {

public static void main(String[] args) {

for (int i =0 ; i 11; i ++){

System.out.println(i);

}

}

}

Snippet 6

Due to Another Sop statement it was happening so I just concatenated it .

public class main {

public static void main(String[] args) {

for (int i = 0; i < 5; i++)

System.out.println(i+" Done");

}

}

Snippet 7

Error is causing due to the remaining assigning of int variable instead it was directly directed towards the condition.

public class main{

public static void main(String[] args) {

int count= 1 ;

while (count < 10) {

System.out.println(count);

count++;

}

}

}

Snippet 8

Condition wrong which was (num > 0 ) which should have been ( num < 6 )

public class main {

public static void main(String[] args) {

int num = 1;

do {

System.out.println(num);

num++;

} while (num < 6 );

}

}

Snippet 9

There are no error as it is just adding 2 in I and printing the value .

public class main {

public static void main(String[] args) {

for (int i = 0; i < 5; i += 2) {

System.out.println(i);

}

}

}

Snippet 10

Error is causing due to the ‘=’ operator which was placed instead of ‘ == ‘ operator

public class main {

public static void main(String[] args) {

int num = 10;

while (num == 10) {

System.out.println(num);

num--;

}

}

}

Snippet 11

As there are no error it is just printing the condition with adding the number which is assign .

public class main {

public static void main(String[] args) {

int i = 0;

while (i < 5) {

System.out.println(i);

i += 2;

}

}

}

Snippet 12

Error is causing due to the x which is declared inside the loop and which is not accessible outside the loop .

public class main {

public static void main(String[] args) {

int x = 0 ;

for (int i = 0; i < 5; i++) {

x = i \* 2;

}

System.out.println(x);

}

}

SECTION 3

1 Write a program to calculate the sum of the first 50 natural numbers.

public class main {

public static void main(String[] args) {

int sum = 0 ;

for(int i = 1 ; i <51 ;i++){

sum = sum + i;

}

System.out.println("Addition of the No is " + sum);

}

}

2 Write a program to compute the factorial of the number 10.

public class main {

public static void main(String[] args) {

int n = 10 ;

long factorial =1 ;

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

factorial = factorial\*i ;

}

System.out.println("Factorial of the No is " + factorial);

}

}

3 Write a program to print all multiples of 7 between 1 and 100.

public class main {

public static void main(String[] args) {

int i = 7 ;

while (i <= 100 ) {

System.out.println("multiple of 7 " + i );

i = i + 7 ;

}

}

}

4 Write a program to reverse the digits of the number 1234. The output should be 4321.

public class main {

public static void main(String[] args) {

int n = 1234 ;

int reverse = 0 ;

while( n != 0 ) {

int no = n % 10 ;

reverse = reverse \* 10 + no ;

n = n /10 ;

}

System.out.println("Reversed No. "+ reverse);

}

}

5 . Write a program to print the Fibonacci sequence up to the number 21.

public class main {

public static void main(String[] args) {

int n = 10;

int a = 0;

int b = 1;

System.out.println("Fibonacci Series up to " + n + " terms:");

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

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

int next = a + b;

a = b;

b = next;

}

}

}

6. Write a program to find and print the first 5 prime numbers.

7. Write a program to calculate the sum of the digits of the number 9876. The output should be 30 (9 + 8 + 7 + 6).

import java.util.Scanner;

public class main {

public static void main(String[] args) {

int n = 55;

int result =0;

while ( n != 0 ) {

int r = n % 10 ;

result = result + r;

n = n/10 ;

}

System.out.print("addition is : "+ result);

}

}

8. Write a program to count down from 10 to 0, printing each number.

import java.util.Scanner;

public class main {

public static void main(String[] args) {

int n = 10;

for(int i = 10 ; i >=0 ; i--){

System.out.println("count "+i);

}

}

}

9 . Write a program to find and print the largest digit in the number 4825.

import java.util.Scanner;

public class main {

public static void main(String[] args) {

int n = 8293;

int result = 0 ;

int r ;

while (n != 0){

r = n % 10 ;

if ( r > result ) {

result= r ;

}

n= n/10;

}

System.out.println("largest is :"+result);

}

}

10 . Write a program to print all even numbers between 1 and 50.

import java.util.Scanner;

public class main {

public static void main(String[] args) {

int n = 50 ;

for (int i = 0 ; i <= n ; i=i+2 ) {

System.out.println(i);

}

}

}

11. Write a Java program to demonstrate the use of both pre-increment and post-decrement operators in a single expression

public class main {

public static void main(String[] args) {

int x = 5;

int y = 10;

int result = ++x - y--;

System.out.println("Result of ++x - y--: " + result);

System.out.println("Value of x after operation: " + x);

System.out.println("Value of y after operation: " + y);

}

}

12 . Write a program to draw the following pattern:

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public class main {

public static void main(String[] args) {

for(int i = 1 ; i < 5 ; i++){

for (int j = 1 ; j < 5 ; j++){

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

}

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

}

}

}

13 . Write a program to print the following pattern:

1

2\*2

3\*3\*3

4\*4\*4\*4

5\*5\*5\*5\*5

5\*5\*5\*5\*5

4\*4\*4\*4

3\*3\*3

2\*2

1

public class main{

public static void main(String[] args) {

for (int i = 1; i <= 5; i++) {

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

if (j > 1) {

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

}

System.out.print(i);

}

System.out.println();

}

for (int i = 5; i >= 1; i--) {

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

if (j > 1) {

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

}

System.out.print(i);

}

System.out.println();

}

}

}