1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int x = 1; // declare and initialize variable**

 **for ( ; ; ) { // endless loop**

 **if ((x++ % 15) == 0) // first test if (x % 15 = 0),**

 **// then increment "x" by 1**

 **break; // if true exit from loop**

 **if ((x % 5) != 0) // test if (x % 5 != 0)**

 **continue; // if true skip remaining code**

 **cout << x << " "; // display "x"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

# If we had: if ((++x % 15) == 0) then the answer would be:



1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int x = 10; // declare and initialize variable**

 **while ( x ) { // loop 10 times**

 **if ( --x == 5 ) // first decrement "x" by 1,**

 **// then test if it is equal to 5**

 **break; // if true exit from loop**

 **cout << x << " "; // display "x"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

**If we had: if(x-- == 5) then the answer would be:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int x = 10; // declare and initialize variable**

 **while ( x ) { // loop 10 times**

 **cout << --x << " "; //decrement "x" by 1 then display it**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

**If we had: cout << x-- << " "; then the answer would be:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int j; // declare variable**

 **for ( j = 1; j <= 10; j++ ) { // loop 10 times**

 **if ( (j > 5) && (j <= 7) ) // if condition true then**

 **cout << j << endl; // display "j"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int j; // declare variable**

 **for ( j = 1; j <= 10; j++ ) { // loop 10 times**

 **if ( (j > 5) || (j <= 7) ) // if condition true then**

 **cout << j << endl; // display "j"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int j; // declare variable**

 **for ( j = 1; j <= 10; j++ ) { // loop 10 times**

 **if ( (j < 5) || (j >= 7) ) // if condition true then**

 **cout << j << endl; // display "j"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int j; // declare variable**

 **for ( j = 1; j <= 10; j++ ) { // loop 10 times**

 **if ( !((j < 5) || (j >= 7)) ) // if condition true then**

 **cout << j << endl; // display "j"**

 **}**

 **cout << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int i, j, k; // declare variables**

 **for ( i = 1; i <= 2; i++ ) // loop 2 times**

 **for ( j = 1; j <= 2; j++ ) // loop 2 times**

 **for ( k = 1; k <= 3; k++ ) // loop 3 times**

 **cout << k << " "; // display "k"**

 **cout << endl << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**int main () {**

 **int count = 0; // declare and initialize variable**

 **while ( count++ <= 5 ) // loop 5 times**

 **// if (count % 2) is true, display "\*\*\*", else display "---"**

 **cout << ( count % 2 ? "\*\*\*" : "---" ) << endl;**

 **cout << count << endl << endl; // display "count"**

 **return 0;**

**}**

**Answer:**

****

**If we had:**

 **cout << (count % 2 == 0 ? "\*\*\*" : "---") << endl;**

**Then the answer would be:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**int main () {**

 **int j = 10, b = 5; // declare** **and initialize variables**

 **for ( ; b <= j; j -= 1 ) { // loop 3 times**

 **if ( (j%b == 0) && (j\*5 <= 25) ) // if condition true**

 **continue; // skip remaining code**

 **if ( (j < 7) || (j >= 9) ) // if condition true**

 **cout << j << endl; // display "j"**

 **}**

 **cout << endl;**

 **return 0;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **for ( int i = 45; i > 1; i = i / 5 ) // loop 3 times**

 **cout << i++ << endl; // display "i", then increment it**

 **cout << "continue"; // display the word "continue"**

 **cout << endl << endl;**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main () {**

 **int i, j, k; // declare variables**

 **int x = 0; // declare and initialize variable**

 **for ( i = 1; i <= 5; i++ )** **// loop 5 times**

 **for ( j = 1; j <= 7; j += 2 ) // loop 4 times**

 **for ( k = 1; k < 15; k += 3 ) // loop 5 times**

 **x++; // increment "x" by 1**

 **cout << x << endl << endl; // display "x"**

**}**

**Answer:**

****

1. **What is the output of the following program?**

**#include <iostream.h>**

**void main() {**

 **int x; // declare variable**

 **for (x = 1; x <= 5; x++) { // loop 5 times**

 **switch (x) { // switch value of "x"**

 **case 1: // if "x" is equal to 1, then**

 **cout << x << endl; // display "x", but don’t break**

 **case 2: // if "x" is equal to 2, then**

 **cout << x << endl; // display "x", but don’t break**

 **case 3: // if "x" is equal to 3, then**

 **cout << x << endl; // display "x"**

 **break; // break from switch structure**

 **default: // if "x" is # from 1,2,3, then**

 **cout << x + 1 << endl; // display "x +1"**

 **}**

 **}**

 **cout << endl;**

**}**

**Answer:**

****