Exam for Chapter 1, 2, 3

Answer the following questions. – 5 points each

1. Code a comment. The comment should say “I love C++!”.

Answer:

// I love C++

Or

/\*I love C++\*/

1. Define a variable called “temp” and initialize it to 12.567 using one line of code.

Answer:

double temp;

Temp= 12.567;

1. What is the difference between **int** and **char** data types?

Answer:

* The int data type is used to represent integers between -2147483648 and 2147483647.
* The char data type is used to represent integers between -128 and 127.

1. Define a **constant variable** called “studs”. Set its value to 20.

Answer:

const int studs;

Studs= 20;

1. When is the “<<” operator used?

Answer:

The “<<” operator is used when the formatted output operation “cout” is used.

The “cout” operator inserts the data that follows it into the stream that precedes it.

1. What is a function?

Answer:

A function is a set of instructions.

1. Write a code that will define a variable and ask the user for their last name.

Answer:

#include <iostream>

#include <stdlib.h>

#include<string>

using namespace std;

int main ()

/\* This program is designed to define a variable and ask the user for their name\*/

{ string last\_name;

cout <<"\nWhat is your last name"<< endl;

cin>>last\_name;

cout<<"your last name is"<< " "<<last\_name <<endl;

//end of the program

system ("pause") ;

return 0;

}

1. Can **char** type have more than one letter under normal situation?

Answer:

Except special symbols which are considered to be as symbol, the “char” data type allows only one symbol to be placed between the single quotation marks.

1. See the equation, **a=6 \* b \* 2 – 2;** if the value of **b=6**, what is the value of a when the statement executes (show work)?

Answer:

A= 6\*(6)\*2-2

A= 36\*2-2

A=72-2

A= 70

1. Following code contains at least 5 errors. Highlight in red at least 5 errors.
   * #include <streamio> / <iostream>
   * int main () {
   * int a, b, c
   * float x, y, z;
   * a=’c’; / a= 7 which is an int’s value
   * cout >> “What is the number?”; / <<
   * cin >> abc; /cin>> a;
   * cute << “The number is: “ << a; / cout
   * }
2. During source program processing (compile, link, load), what does the linker do?

Answer:

The linker takes one or more object files generated by a compiler and combines them into a single executable file, library file or another object file.

1. What is the result of the following statement?
   * float = 36.6;
   * y = static\_cast<int>(x)/3;

Answer: y= static\_cast<int> (36)/3;

Y= 12

1. In order to use “setfill(‘\*’)”, what header file do I need to include?

Answer:

#include<iomanip>

1. What do you think of this class so far?

Answer:

This class helps us to design programs and to interpret statements

Coding. – 15 points each

1. Write an **entire program** that will ask the user for their favorite decimal number. Print the number without the decimal point. Make sure that your program includes comments.

Answer:

#include <iostream>

#include <stdlib.h>

#include<iomanip>

using namespace std;

int main ()

/\* This program is designed to ask user for user's favorite decimal number \*/

{ double decimal\_number;

cout<< fixed << showpoint<< setprecision(0);

cout <<"\nWhat is your favorite decimal number?"<< endl;

cin>>decimal\_number;

cout<<"\nyour favorite decimal number is:"<< " "<<decimal\_number <<endl;

cout<<" "<<"have a nice day"<< endl;

// end of the program

system ("pause") ;

return 0;

}

1. Write an **entire program** that will ask the user for 2 values: years, and months. Convert the values in days and print the appropriate message. Assume that a year has 365 days and month has 30 days. Be sure to comment the program and make use of constants.

Answer:

#include <iostream>

#include <stdlib.h>

#include<string>

using namespace std;

int main ()

/\* This program is designed to define a variable and ask for years and months\*/

{

const int year= 365, month= 30;

int years, months;

cout <<"\nWhat is your years?"<< endl;

cin>>years;

cout <<"\n what is your months?"<<endl;

cin>>months;

cout<<"your years are"<< " "<<year \* years <<" "<< "days"<<endl;

cout<< "your months are"<< " "<< month \* months<<" "<<"days" <<endl;

cout<<" "<< " have a nice day"<< endl;

// end of the program

system ("pause") ;

return 0;

}