**CS201 Viva Test Questions File Spring 2019**

**What Is a Variable?**

From a programmer's point of view, a *variable* is a location in your computer's memory in which you can store a value and from which you can later retrieve that value.

**Compiler**

A compiler is a special program that processes statements written in a particular programming language and turns them into machine language or "code" that a computer’s processor uses. Typically, a programmer writes language statements in a language such as [Pascal](http://searchenterpriselinux.techtarget.com/definition/Pascal) or [C](http://searchwinit.techtarget.com/definition/C) one line at a time using an editor. The file that is created contains what are called the source statements. The programmer then runs the appropriate language compiler, specifying the name of the file that contains the source statements.

**Translator**

A translator is a computer program that performs the translation of a program written in a given programming language into a functionally equivalent program in a different computer language, without losing the functional or logical structure of the original code (the "essence" of each program).

**Why use pointer?**

Because pointers allow you to access memory addresses and passes by reference.

**FOR and While Loop**

While: we don't know exactly how many times the loop will run.

FOR: we know exactly how many times the loop will run.

Do While: body of the **loop** is always executed first. Then, the test condition is evaluated

**Array**

An array is a series of elements of the same type placed in contiguous memory locations that can be individually referenced by adding an index to a unique identifier.

**Types of Arrays**

Single / One Dimensional Arrays in C++

**Following are the differences Between C and C++ :**

|  |  |
| --- | --- |
|                                **C** |                               **C++** |
| **1.** C is Procedural Language. | **1.** C++ is non Procedural i.e Object oriented Language. |
| **2.** No virtual Functions are present in C | **2.** The concept of virtual Functions are used in C++. |
| **3.** In C, Polymorphism is not possible. | **3.** The concept of polymorphism is used in C++.Polymorphism is the most Important Feature of OOPS. |
| **4.** Operator overloading is not possible in C. | **4.** Operator overloading is one of the greatest Feature of C++. |
| **5.** Top down approach is used in Program Design. | **5.** Bottom up approach adopted in Program Design. |
| **6.** No namespace Feature is present in C Language. | **6.** Namespace Feature is present in C++ for avoiding Name collision. |
| **7.** Multiple Declaration of global variables are allowed. | **7.** Multiple Declaration of global varioables are not allowed. |
| **8.** In C* scanf() Function used for Input.
* printf() Function used for output.
 | **8.** In C++* Cin>> Function used for Input.
* Cout<< Function used for output.
 |
| **9.** Mapping between Data and Function is difficult and complicated. | **9.** Mapping between Data and Function can be used using "Objects" |
| **10.** In C, we can call main() Function through other Functions | **10.** In C++, we cannot call main() Function through other functions. |
| **11.** C requires all the variables to be defined at the starting of a scope. | **11.** C++ allows the declaration of variable anywhere in the scope i.e at time of its First use. |
| **12.** No inheritance is possible in C. | **12.** Inheritance is possible in C++ |
| **13.** In C, malloc() and calloc() Functions are used for Memory Allocation and free() function for memory Deallocating. | **13.**In C++,  new and delete operators are used for Memory Allocating and Deallocating. |
| **14.** It supports built-in and primitive data types. | **14.** It support both built-in and user define data types. |
| **15.** In C, Exception Handling is not present. | **15.** In C++, Exception Handling is done with Try and Catch block. |

**Infinite loop**

A loop becomes infinite loop if a condition never becomes false.

**Define class**

A class in C++ is a user defined type or data structure declared with keyword class that has data and functions (also called methods) as its members whose access is governed by the three access specifies private, protected or public (by default access to members of a class is private).

**I've done my CS201 viva.. 29 july 2019**
1 Variable and constant kya hoty hn..
2 loops ku use krty hn hm program me..
3 string me condition change krny k ley konsa syntax use hota h..
4 intdatatype variable h ya constant.
5 pointer kya hota h..
6 structure default by public hota h ye private..
7 ek pic send ki thi program ki uski output btani thi..

**CS201 Viva Questions 30 july 2019**

1. What are variable?
2. What are pointer?
3. What is Function, its types, calling of Function
4. What are constructor?
5. What is structure?
6. Data type

**CS201 VIVA Question shared.25 july 2019**

1. Difference between while and do while loop.
2. What is structure? Why we use structure?
3. why we use header in any program
4.Types of arithmetic operators?
5. Types of logical operators.
6.Difference between call by value and call by reference
7. Why we use pointer?