C++ Programming – Lecture 8

Miscellaneous Issues

- Two types of comments can be used in C++:

  si = p * n * r/ 100 ; /* formula */

  si = p * n * r/ 100 ; // conversion formula

- Common usage:

  /* .. */ - Use for multi-line comments

  // - Use for single-line comments

- Variables can be defined just before point of usage. Example:

  for (int j = 10 ; j <= 100 ; j++)

      cout << j << endl ;

- :: is a scope resolution operator. It can be used for 2 purposes:

  1) Define member functions outside a class:

  Sample :: void display() { .. }

  2) Distinguish between local and global variable of same name. Example:

  cout << a ; // local variable a

  cout << ::a // global a

- Reference is a constant pointer that gets automatically dereferenced.

- Multiple references to a variable are allowed.

- We cannot create a reference to reference.

- Array of references is not allowed.

Type Conversion

- For built-in types widening conversions happen implicitly, whereas narrowing conversion should be done using typecasting.

- Conversion from built-in type to user-defined type can be done using a constructor.

- Conversion from user-defined type to a built-in type can be done using overloaded typecast operator function.

- Conversion from one user-defined type to another can be done using a conversion function when the conversion function is in source object. This conversion function would be overloaded typecast operator function.

- Conversion from one user-defined type to another can be done using a constructor when the conversion function is in destination object. This conversion function would be a constructor function.