SNS COLLEGE OF TECHNOLOGY, COIMBATORE –35
(An Autonomous Institution)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Data Conversion

A user-defined data types are designed by the user to suit their requirements, the compiler does not support automatic type conversions for such data types therefore, the user needs to design the conversion routines by themselves if required. There can be 3 types of situations that may come in the data conversion between incompatible data types:

- **Conversion of primitive data type to user-defined type:** To perform this conversion, the idea is to use the constructor to perform type conversion during the object creation. Below is the example to convert **int** to **user-defined** data type:

```
#include <bits/stdc++.h>
using namespace std;

// Time Class
class Time {
    int hour;
    int mins;

public:
    // Default Constructor
    Time()
    {
        hour = 0;
        mins = 0;
    }

    // Parameterized Constructor
    Time(int t)
    {
        hour = t / 60;
        mins = t % 60;
    }

    // Function to print the value
    // of class variables
    void Display()
    {
        cout << "Time = " << hour
             << " hrs and "
             << mins << " mins\n";
    }
};

// Driver Code
int main()
{
    // Object of Time class
    Time T1;
    int dur = 95;

    // Conversion of int type to
    // class type
    T1 = dur;
    T1.Display();

    return 0;
}
```

Output

```
Time = 1 hrs and 35 mins
```