## Notes Session 7

```
Structure Name
struct SEmployee
{
      char m_Name[50];
      int m BirthDateDay;
      int m_BirthDateMonth;
                                  Structure Body
      int m BirthDateYear;
      int m_Salary;
};
```

Structure Members/Attributes

## **Nested Structure**

**Structure** 

```
struct SDate
      int m Day;
      int m Month;
      int m Year;
struct SEmployee
     char m Name[50];
     struct SDate m_BirthDate;
      struct SDate m GraduationDate;
     int m_Salary;
};
```

```
Масго
                                                             Function
                Macro is Preprocessed
                                                        Function is Compiled
                  No Type Checking
                                                       Type Checking is Done
                Code Length Increases
                                                     Code Length remains Same
5
                 Speed of Execution is
                                                         Speed of Execution
                                                             is Slower
                        Faster
     Before Compilation macro name is replaced by
                                                        During function call,
                                                      Transfer of Control takes
                                                               place
      Useful where small code appears many time
                                                      Useful where large code
                                                         appears many time
    Generally Macros do not extend beyond one line
                                                       Function can be of any
                                                          number of lines
```

```
enum
       enum flag { const1, const2, ..., constN };
       // Changing default values of enum
       enum suit {
            club = 0,
            diamonds = 10,
            hearts = 20,4
            spades = 3,
       };
```

```
#if defined( STDC_VERSION ) && STDC_VERSION >= 199409L
/* C95 compatible source code. */
#elif defined( ANSI )
/* C89 compatible source code. */
#endif
```

## Union

## struct Emp char X; // size 1 byte float Y; // size 4 byte }e;

Structure

```
<u>Union</u>:
union Emp
             doubleValue
char X;
float Y;
}e;
   X & Y
e (union variable)
          allocates storage
```

```
floatValue 

√ intValue
```

**C** standard

union UNUMValue int intValue; float floatValue; double doubleValue; };

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equal to largest one