**Chapter 8: PREPROCESSOR DIRECTIVES**

**Topic – 1: Commonly Used PD**

**Definition Based PD**

***#undef PI***

* For **macros** defined through ***#define***, their data types are decided by **compiler**.

**Defining Function Using PD**

***// #define FUNCTION\_NAME (parameter) (return)***

***#define AREA (r) (PI\*(r)\*(r))***

**Extending Number To Next Line**

***#define MY\_FLOAT \***

***4.5652389***

**Topic – 2: In Code PDs**

* ***\_\_DATE\_\_*** current date in **mm dd yyy**
* ***\_\_TIME\_\_*** current time in **hh:mm:ss**
* ***\_\_FILE\_\_*** current filename as **string**
* ***\_\_LINE\_\_*** current line number as **integer**

**Topic – 3: Operational PDs**

**Conditional Compilation Directives**

***#if !defined(PI)***

***/\* Statements \*/***

***#endif***

* We can even write statements like **int x = 5;** in **macro conditional blocks**!

**Preprocessor Operators**

* **Stringification/ stringizing** operator converts parameter to string constant.

***// We can name TO\_SSTR() function as something else too***

***#define TO\_STR(x) #x***

***int main()***

***{***

***printf("%s", TO\_STR(123/@$@12));***

***return 0;***

***}***

**String Concatenation**

***// STICK is again a custom function name***

***#define STICK(name, surname) name##surname***