**DAY -09**

**Goto:** it is a jump statement

LoopLabel:

If()

Stmts;

goto Exitlabel;

else

goto LoopLabel;

ExitLabel:

Stmts;

**Arrays: used for a particular purpose. It stores consecutive memory location.**

**Syntax:**

Dt ArrName[cap];

Int arr[10];

Access elements of arr to store or evaluate:

Arrname [indexvalue] = value;

* Index value from 0 to CAP -1

Base Address + (index value \* size of (datatype))

AO(Base Address + (index value \* size of (datatype)))

CO(Base Address + (index value \* size of (datatype)))

Types of arrays:

1. Static array: The size of the array is known before the compilation time.

Ex: int arr[5];

1. Dynamic array: size of the array is allocated/known at run time.

Ex: malloc, calloc, realloc => stdlib.h

1. Stretchable array: At run time, we stretch or shrink the size of the array.

Malloc, calloc, realloc

1. Mutable array: The size of the array is known/allocated at the time of linking and before execution.

Write a program to place odd numbers in an array b/w n and m?

**Two-dimensional array:**

Int a[2] = {1,2}

Dt arrName [row] [col];

Int a[2][3] = {{1,2,3},{4,5,6}}

**Functions:**

1. Std lib functions

Printf, sqrt, abs, pow

1. User defined

User is defining his/her own task to be performed.

Syntax:

rdt fName(input args)

{

Sts;

Return rdt;

}

* Function definition is in .c file
* Function declaration in header file .h file.

In function to pass the array,

Int fName(int [])

To know the size of the array,

CAP = sizeofa()/sizeof(a[0])