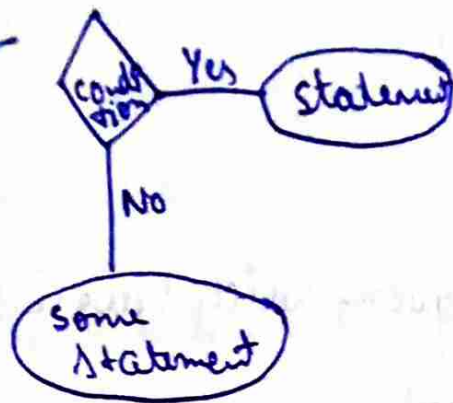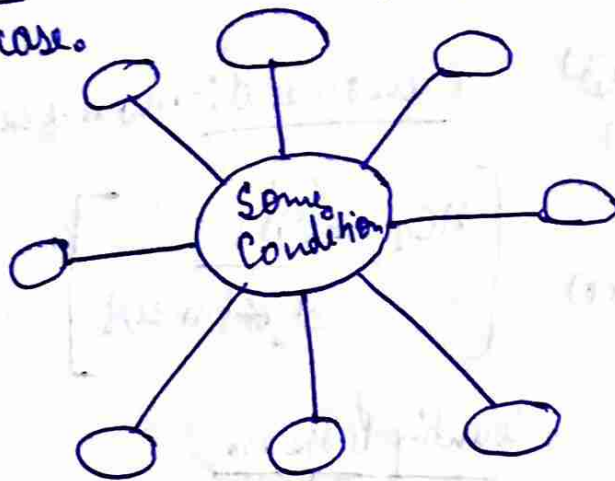# Lecture:-8
Switch Statements & functions

If statement:-

Switch case:- There are multiple options or alternatives to do in switch case.


```
switch (expression)
{              ──→ integers/character
  case const1:
      ‿‿
      ‿‿
      break;
  case const2:
      ‿‿
      break;
  default:
      ‿‿
}
```

continue:- To skip iteration.

use of continue keyword in switch is not valid.

Mini Calculator Program

$i/p \to x, y,$ operation

$\downarrow, \downarrow \qquad \downarrow$

3   4   *, /, +, -, %

$o/p \to 3*4 \to 12$

functions :- It is a program which have well defined task.

$i/p \to$ [function] $\to o/p$

Pow(a,b) → ⊙⊙⊙⊙⊙⊙

```
int power (int a, int b)
{
    int ans=1;
    for(int i=0; i<b; i++)
    {
        ans = ans*a;
    }
    return ans;
}
int main()
{
    int a,b;
    cin>>a>>b;
    int ans = power(a,b);
    cout << ans << endl;
    return 0;
}
```

Even or odd :- no is even or odd

$$\left[\quad nc_y = \frac{n!}{y! * (n-y)!} \quad \right]$$

counting program

function stack:

```
main()          → n(u()           → factorial()
{               {                  {
    n(u();          } factorial();     }
}
```
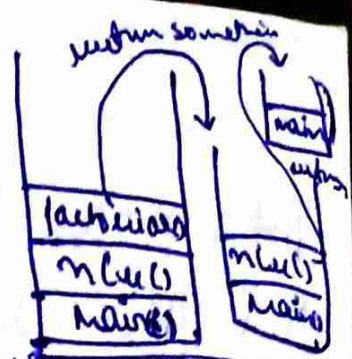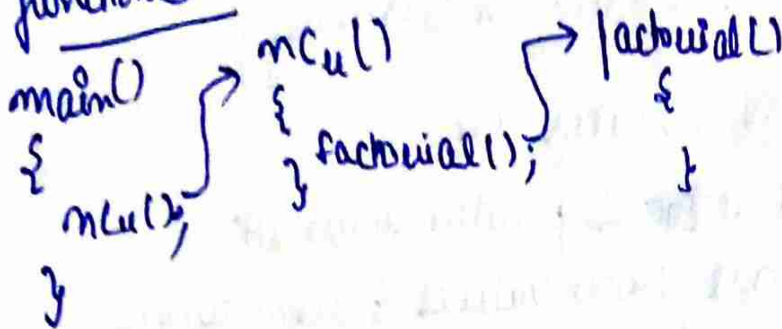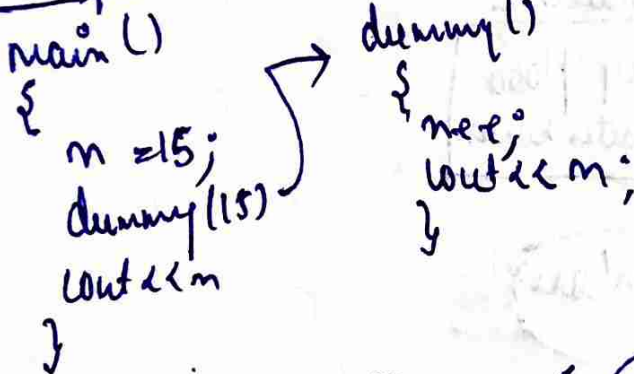

(function call stack)

means shaddi
ki plates.
(means जो sabse phle
Rakha gaya tha vo
Plate last mei
uthaya jayega).

Pass by Value:-

```
main ()          → dummy ()
{                {
    n =15;           } nee;
    dummy (15)       cout << m;
    cout << m        }
}
```


dono alag hai

jab ye vapas ayega And
nei main nei execute kaene
ka try kaunga to ye 15 hi aayega.
(when main gives m to dummy it
create a copy of m).
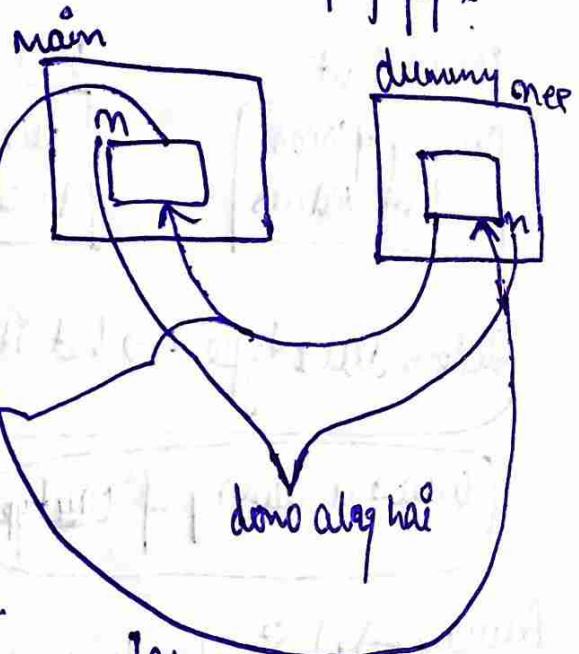
jab ye pass houchahai
dummy function के Andar
Sovha A new m
ban rha hai . name
same nai but storage
same nahi hai.