**LOOP**

* Keywords
  + Return
  + Continue
  + Break
* Scope of variable
* Life Time of a variable
* **int** i=1;
* **while**(i<=5)
* {
* **int** a=10;
* System.***out***.println(a);
* a=a+1;
* i=i+1;
* }

Every time we will get 10

================================================================



**if**(a<=10)

{

**int** b=20;

}

**else**{

**int** b=30;

}

System.***out***.println(b);

//you will get an error as b is out of scope

============================================================

* + - * **int** a=10;
* **double** a=100 ;
* //not allowed to redefine same variable

======================================================

* **for**(**int** i=1;i<=5;i++)

{

System.***out***.println(i);

**int** a=10;

}

//here I will get memory for once but ,a will get memory again and again => here scope of I and a is same but life time of both is different

======================================================

* Calculate Factorial
* Calculate Permutation AND COMBITNATION
  + CALCULCATE N!,R!,(N-R)!
  + Using Without Functions
  + Using Functions

**FUNCTIONS**

Functions are used to increase Readability

Functions are used to reduce Redundancy

Functions make your code, easy to debug

Functions modularize your code

* Execute all codes had been made so far , do code again all with functions
* Explain Functions Stack
* How function stack work again

Like main call fun1 , func1 call func2

Now fun1 run further when fun2 will get end

And main will continue to run as fun1 will get end(when fun2 had already ended)