

Day-2 JA111 Batch

```
function calculatefactorial(var n){
    var result = 1;
    for(int i = 1 ; i = n; i++)
        result = result * i;
    return result;
}
```

this is a function to calculate factorial of a number and return parameter n the integer value whose factorial is to compute

```
function calculatefactorial(var n){
    // create a variable to hold factorial of number n
    var result = 1;
    // logic to find factorial
    for(int i = 1 ; i = n; i++)
        result = result * i;
    // return the result
    return result;
}
```

primary & secondary memory

the memory that is accessible to the CPU is called primary memory

primary memory can be volatile as well as non volatile

e.g. RAM, ROM

the memory that is not accessible by the CPU is called secondary memory

secondary memory is always non-volatile.

4 GB RAM = 4 x 1024 MB = 4 x 1024 x 1024 KB = 4 x 1024 x 1024 x 1024 Bytes = 2^{32} bytes

A variable is a named memory location whose value can be changed.

9gold [invalid]

abc [valid]

principleAmount [best case]

byte b = 10; primitive

Byte b = 10;WRAPPER;

type conversion and casting

byte b = 10;

int i = b; widening conversion, automatic conversion

int a = 100;

byte c = a; Error

byte c = (byte)a; Narrowing conversion, explicit conversion

float f = 1.5f;

int i = f; Error

int i = (int)f; Narrowing conversion, Truncation

System.out.println(f + " " + i); 1.5 1

int a = 10 + 20; Expression

operands 3, 10, 20 are operands for +, 30 & a are operands for =
operators 2. + and =

int a = 10;

int b = -a; unary as well as binary

float a = 2 + 3 * 5;

float a = 17;

float b = 2 * 3 * 5;

float b = (2 * 3) * 5;

float b = 0;

byte b = 10;

System.out.println(10 * 5 * 2); Error

10 * 5 * 2

(10 * 5) * 2

false * 2

10 * 5 && 5 * 2

int i = 0;

boolean b = ++i == 0 && ++i == 2;

System.out.println(b + " " + i); false 1

i = 0;

b = ++i == 0 & ++i == 2;

```

System.out.println(b + " + " + i);    false 2
i = 0;
b = ++i == 1  ++i == 2;
System.out.println(b + " + " + i);    true 1
i = 0;
b = ++i == 1  ++i == 2;
System.out.println(b + " + " + i);    true 2
expression-1 expression-2expression-3;
int no = some-value;
S.o.pln(no % 2 == 0?"Even" : "Odd" );
int age = some-value;
if(age = 18)
    S.o.pln("Adult" );
else
    S.o.pln("Minor" );
-----
int division = some-value;
switch(division){
    case 1
        S.o.pln("Hurray" );
        break;
    case 2
        S.o.pln("Good" );
        break;
    case 3
        S.o.pln("God saves me" );
        break;
    default
        S.o.pln("BLNT" );
}
-----
for(int i = 0; i < 10; i++)
    System.out.print(i + " ");
0 1 2 3 4 5 6 7 8 9
-----
int i = 10;
do{
    System.out.print(i + " ");
    i--;
}while(i > 0);
10 9 8 7 ..... 0

```