**Static memory allocation & Dynamic memory allocation:**

Static memory allocation:

If we give an (int) integer for values, integer only initialized, we can’t give any values other than integers.

Example: int i=0;

Here only we can initialize integer value.

Dynamic memory allocation:

The Data type initialized by the values.

**Example:**

Var i = 5.0;

Here this variable has float data type because the value is a float.

**Disadvantages of dynamic memory allocation:**

Variables have life-time tis life time makes slow our program process.

Who allocates life-time?:

If we decrease the variable life-time that will secure our data and makes our web faster.

Which is best life-time reduce or long time use:

Defiantly the life-time but in rare case we can use the long time .

**What are the shortest life time :**

Anonymous variable

Nameless class

Nameless function

The anonymous life-time is based on the element life time;

**Example**:

10\*5+10

The answer is 50 the first element life time is the anonymous life time, execute the one element lifetime .

Reason for use :

Security Hackers can’t hack our data, because the data will erase from memory.

**What is hacking?**

The main reason of invented hacking is make people install the new os on there system . hackers only hack data . later the period some people use it to steel another person data and it’s illegal too, if we want to product the data then erase it from memory.

**Variable types:**

There are two types of memory;

Stack memory – usually called as internal memory.

Heap memory - usually called as external memory or sd card memory.

**Stack memory**:

Only store : primitive variable or classic variable or bult-in variable or value type variable different names but same process. All are in small case.

**Example:**

Int, float, char, etc.

**Reference type variable:**

Reference type variable starts with capital character.

Int i

**<data-type>int , <variable name>i.**

**Heap memory**:

Reference type variable(object):

Developed by enumeration, structure, union ,class , interface. These features are used to develop reference type variable. Stores in heap memory.

**Example:**

**Var fis = new FileInputStream();**

Class name : **FileInputStream**

Object name : **fis**.

Reference type variable is heavy weight data , we need to make sure the reduce the life-time otherwise our program process being dead slow.

**Who is in this class and what is class?**

Class is an user defined value.

Only two things’ Data and code.

**Example**

Family considers as class

Parent – code

Child – data.

Code and data are class property.

**Why we need to create function or function security.**

If function or procedure or variable is in inside of the class it’s secured.

Object is bridge between class property and user access.

Object is mandatory to call a data or code in inside class.

Object gives permission for access class property.

Object invoke a class; object operate a class.

Inside class variable are data’s and inside class functions are code.

Also, inside class function called as method.

**Reference type variable alias name is user define variable.**

Example class consider as class object consider as driver.

Driver drives a car object operates class property.

**What is enumeration:**

Enumeration have set of Constance (**const**). limited literals example months name or week days.

Object alias name is instance.

Function does starts with dot and method starts with dot; both are ends with ().

There is possibility to access the inside class variable without object. This process called as class variable or static variable (class data or static data). This method have security less like low weight security.

Declare alias name is create.

Access the inside class variable with object, called as instance method.

We can’t make variable name as static or any reserved keys.

Static is modifier in future we called this as storage clause.

Int – data type

Integer – class

Object name should explain , object create from which one class.

Example : Frame - class , fr- object name.

**Variable allocates memory but when?**

When we are define or initialize object then .

Var fis = new FileInputStream(); **(= new ) operator allocate memory to object.**

We can’t invoke class property without new operator.