Class and object

variables in java :-

1) Primitive variable -- It saves value .

int a=10;

2) Reference variable---It saves address .

String args=new String("Hello");

args-🡪 [Hello]

String class Object

1000 memory

1) class -- is group of variables and methods . Class is a template . Using this template we

create objects .

class Student

{

int rno,marks ; // variables

// constructor

Student(int a,int b)

{

rno=a;

marks=b;

}

void display(); // method

}

2)Object :- any real time entity is an object . e.g. Car is a class and BMW , Ford are objects .

Country is a class and USA , India are objects of a class .

Student bob=new Student(1,90);

Student tian=new Student(2,80);

3)Constructor :-

It is a special method whose name is similiar to class name . It can't have return type .

It is used to initilize object variables / instance variables .

It is called when object is created .

StudentData

\*\*\*\* Naming Rules in Java :-

java is case sensitive language . r and R are different .

1) class/interface name should begin Capital letter . Every new word in it should begin with Capital letter .

e.g. class ObjectInputStream

class FileOutputStream

class PageContext

class StudentData

2) Variable/method/object name should begin small letter . Every new word in it should begin with Capital letter .

Student tian;

int myAge;

void displayData() ;

3) Constants in java should be in capital letter only . Words are separated by underscore ( \_ ) .

final keyword is used to define constants in java . We can't change value of constant .

final int MAX\_AGE=100 ;

Student bob=new Student(1,90);

rno=1

marks=90

display()

bob------------------🡪

(1000)

1000 address location

Student class object

bob is a object reference variable which Is storing address of an object .

In c language , variable which is storing address is called pointer variable . In java we call it as object reference variable.

Every object has 2 things

1. State :- values of variables present in object at particular point of time is called state of an object .

Rno=1 and marks=90 is called as state of an object .

1. Methods :- display()

To access object variables & method, use object reference and dot ( . ) operator .

bob.marks

bob.display() ;

2)

Student tian=new Student(1,90);

rno=1

marks=90

display()

tian------------------🡪

(2000)

tian.display();

2000 address location

Student class object