# **STUDENT MANAGEMENT SYSTEM**

This is a Student management System done in core java

* This is main class A,it is a template or plan ,in this we are defining variables like name with data type of String ,id with data type of Integer, Course with data type of String, fee with data type of double to store values.
* Fee is given as static because the fee structure for any course is same.
* Here we have used Constructors to initialize the class A.
* We are generating Id using random function which should be a unique 5 digit number
* We have also generated getters and setters.
* We are using toString() method to print the details of the enrolled students in a list.
* In the main method we are using Scanner class and object to take inputs dynamically.
* Creating list to store students details in lists.
* Using Scanner we are taking dynamic input from the user to enroll the students.
* The user needs to enter the name and course he/she wants to enroll in.
* We have 2 courses predefined in which user can select any one.
* If the user selects or inputs the course which is not listed ,then we will display incorrect course selection.
* Upon selecting the course ,we display the fee structure to be paid by the user or student.
* The user needs to input the amount he has paid.
* If the user has already paid a certain amount then he/she needs to input it .
* Then we need to calculate the remaining amount to be paid.
* If the user has paid the total fee we will display that he/she has no remaining balance to be paid or fee has been fully paid.
* If the user has paid extra amount that we will display they have paid extra amount.
* creating object reference for the class A
* since we have initialized the constructor we have to pass the arguments in the object reference.
* here we are displaying the full details of the student i.e
* name
* id
* course
* fee
* amount paid
* balance to be paid
* looping the code so we can continue to enter the student details till we need.
* We are using do while loop for this .
* Because the do while loop executes the code atleast once.
* We are printing the number of students enrolled.
* Printing the details of the students enrolled in a list.