SNS COLLEGE OF TECHNOLOGY

Coimbatore-35.
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade (Cycle III)
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DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

COURSE CODE & NAME : 23CST205 - Object Oriented Programming Using Java

II YEAR/ III SEMESTER

UNIT – I INTRODUCTION TO OOP

Topic:Classes

Class

1. Collection of objects is called class. It is a logical entity.
2. A class can also be defined as a blueprint from which you can create an individual object.
3. Class doesn't consume any space.A class is a user-defined blueprint or prototype from which objects are created.
4. It represents the set of properties or methods that are common to all objects of one type.
5. Using classes, you can create multiple objects with the same behavior instead of writing their code multiple times.
6. This includes classes for objects occurring more than once in your code.

Class

- In general, class declarations can include these components in order:
- **Modifiers:** A class can be public or have default access (Refer to this for details).
- **Class name:** The class name should begin with the initial letter capitalized by convention.
- **Superclass (if any):** The name of the class's parent (superclass), if any, preceded by the keyword extends. A class can only extend (subclass) one parent.
- **Interfaces (if any):** A comma-separated list of interfaces implemented by the class, if any, preceded by the keyword implements. A class can implement more than one interface.
- **Body:** The class body is surrounded by braces, { }.

Class

A class is a user-defined data type.

It consists of data members and member functions, which can be accessed and used by creating an instance of that class.

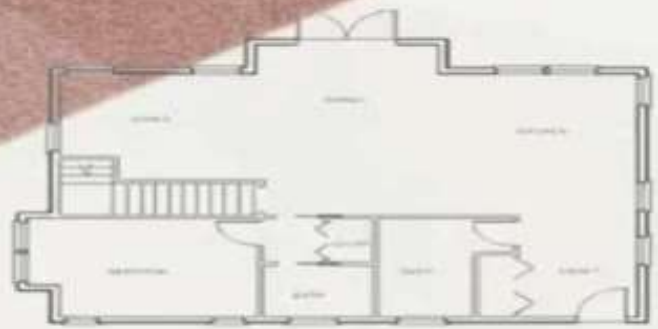
It represents the set of properties or methods that are common to all objects of one type.

A class is like a blueprint for an object.

For Example:

Consider the Class of Cars. There may be many cars with different names and brands but all of them will share some common properties like all of them will have 4 wheels, Speed Limit, Mileage range, etc. So here, Car is the class, and wheels, speed limits, mileage are their properties.

Class



Blueprint

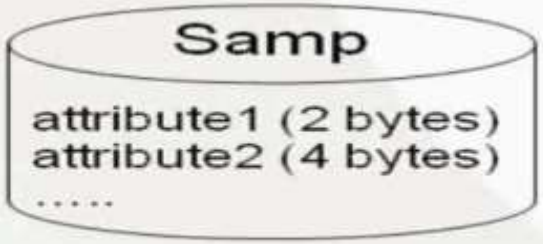
Real house

Class

Sample(class name)
attribute1 attribute2 ....
method1() method2() .....

Object

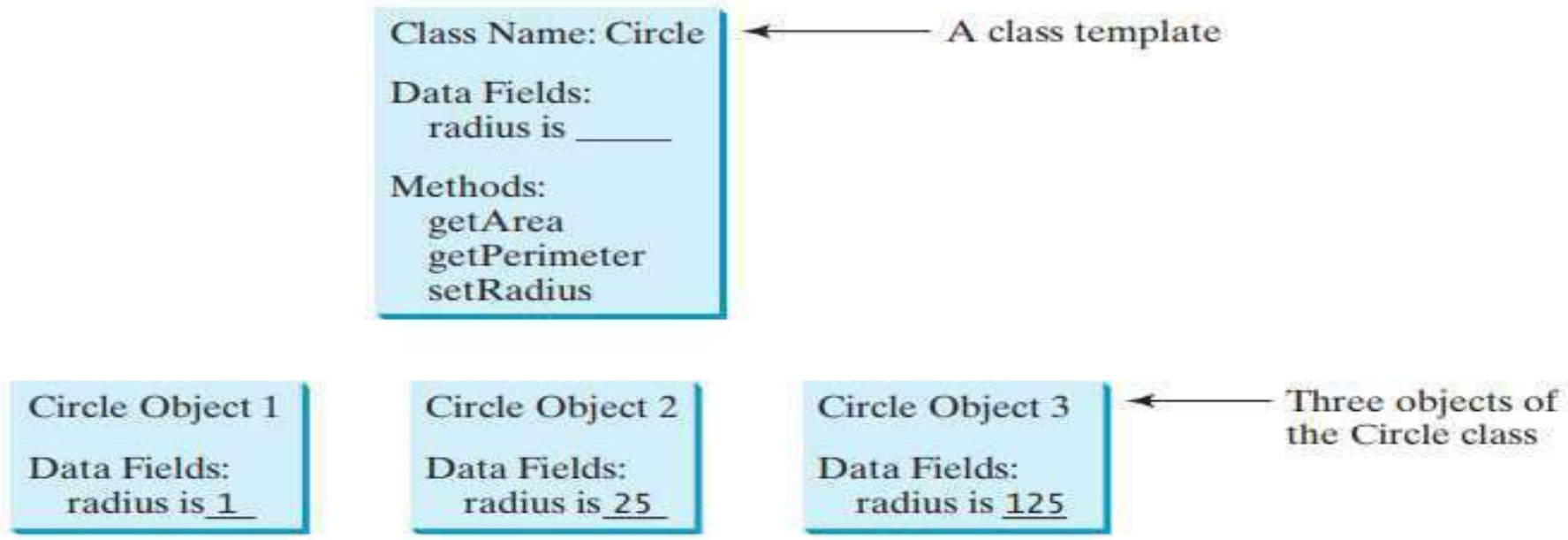
Heap




class
Car
objects
Volvo
Audi
Toyota

A class is a template for creating objects

Below diagram shows a **Circle** class which is a template to create three objects:




THANK
YOU!