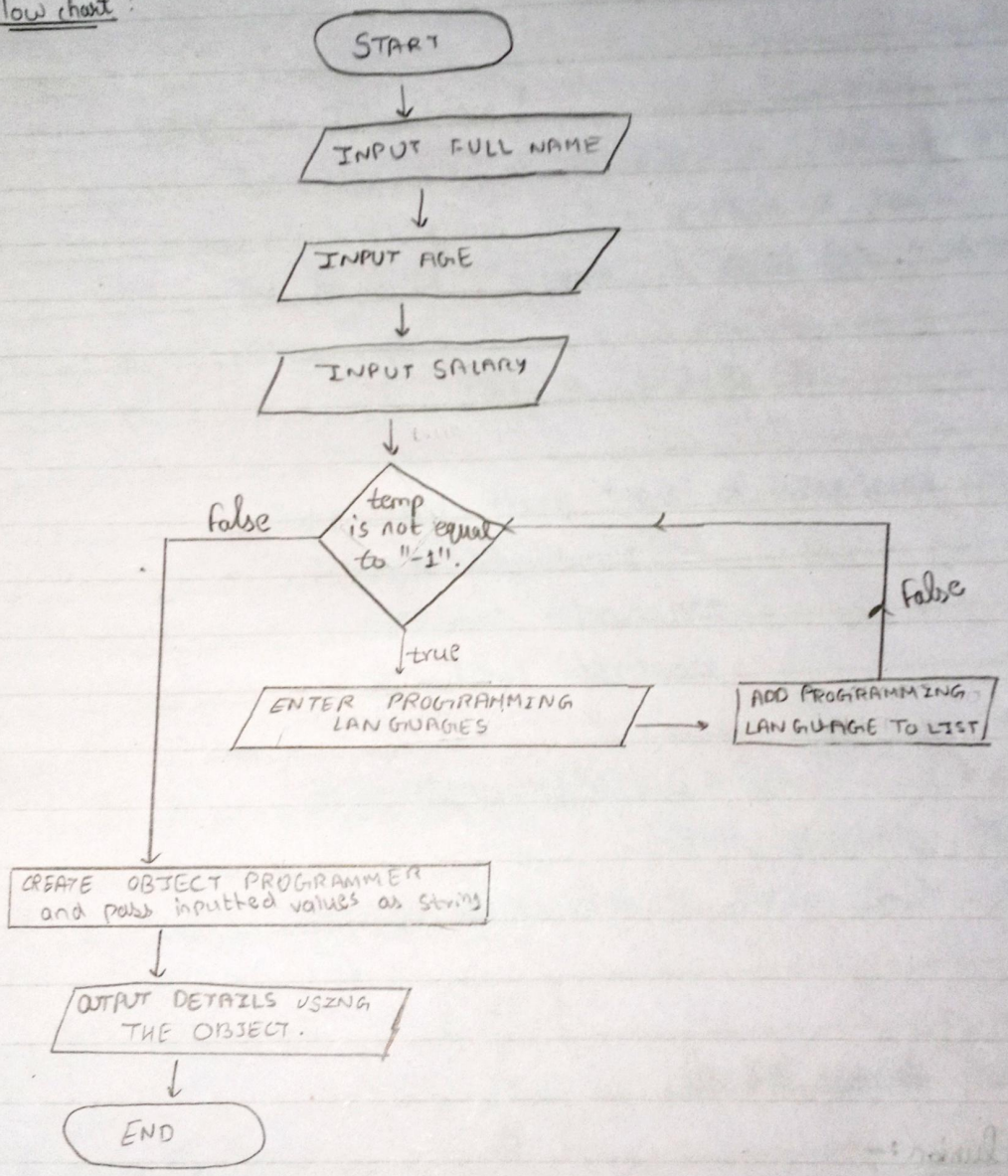
Practical No. 08

Aim: Create, debug and run java programs based on inheritance.

Flow chart:



Code 1: SINGLE INHERITANCE

Practical No. 08

Aim: Create debug and run Java programs based on Inheritance.

Theory:

What is Inheritance?

→ The capability of a class to derive properties and characteristics from another class is called Inheritance. The keyword 'extends' is used for inheritance java.

For example:

```
class A extends B;
```

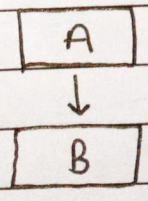
There are three types of inheritance in java.

i) Single inheritance
ii) Multi-level inheritance
iii) Hierachical inheritance

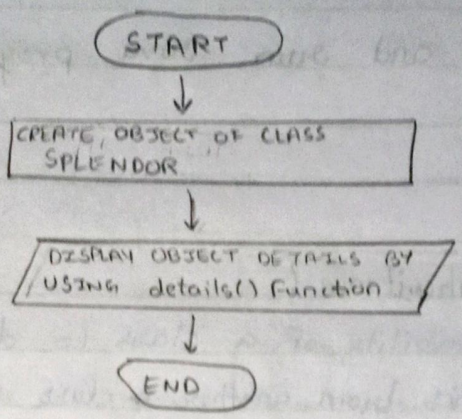
i) Single Inheritance:

When a class ~~extends~~ inherits another class, it is known as a single inheritance.

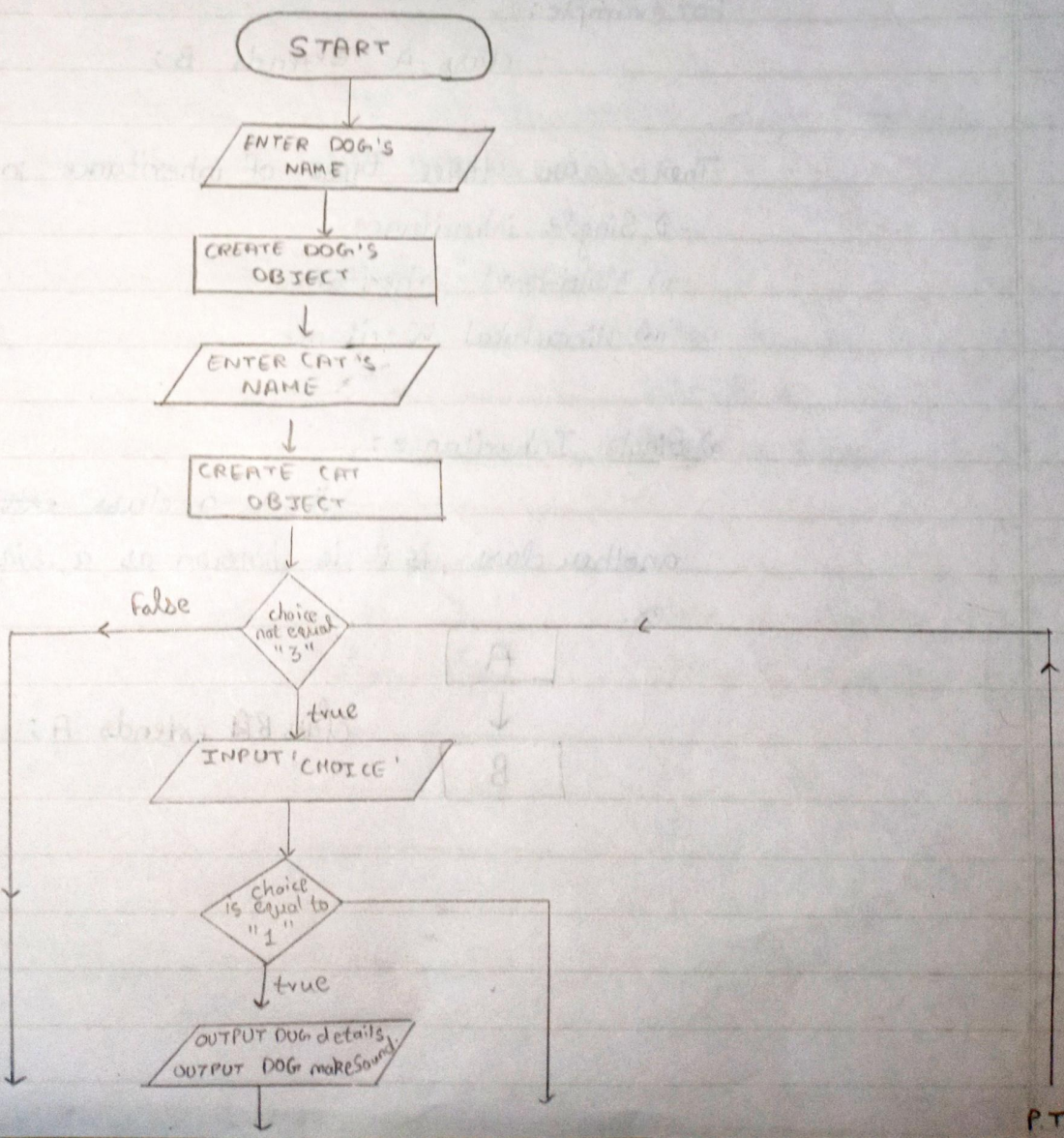
ex.



class B extends A;



CODE 2 : MULTI-LEVEL INHERITANCE



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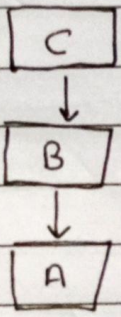
ii) Multi level Inheritance:

When their is a chain of inheritance. It is known as Multi-level Inheritance.

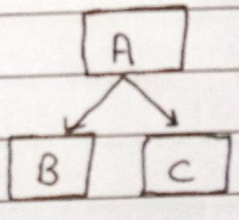
Example:



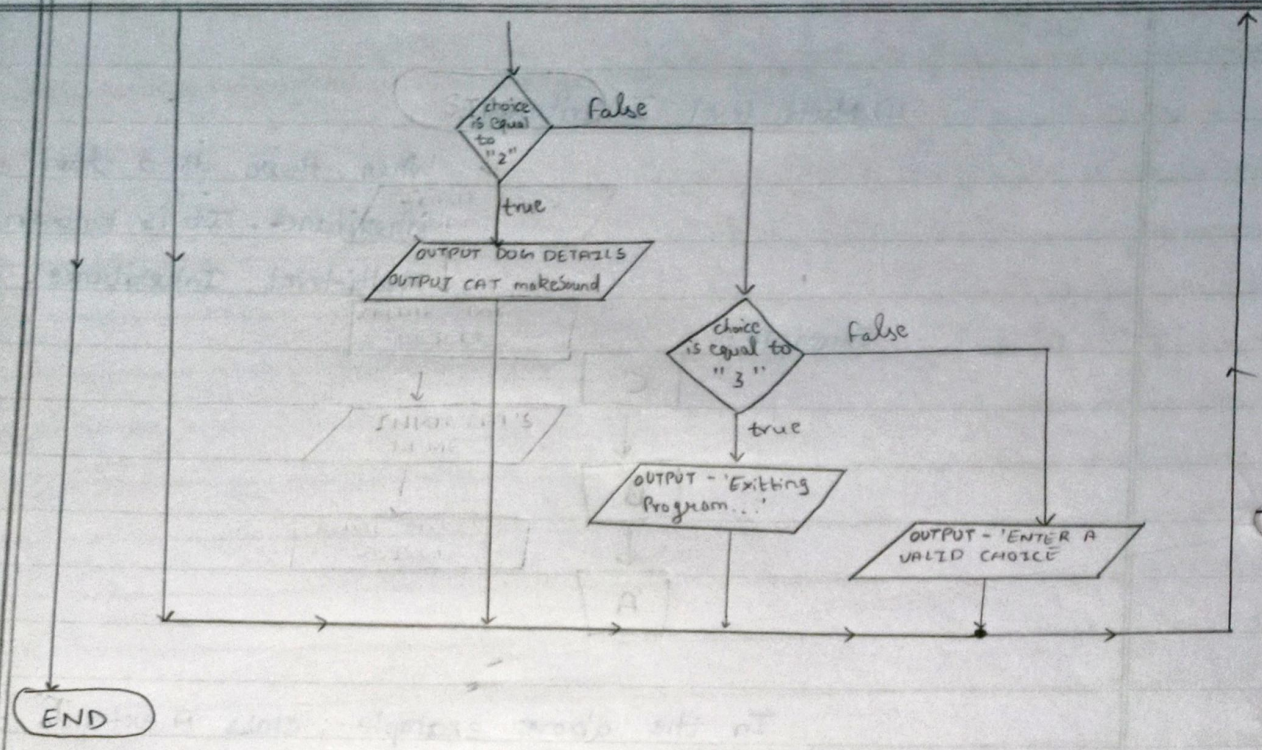
In the above example, class A extends class B which extends class C.

iii) Hierarchical Inheritance:

When two or more classes inherit a single class, it is known as hierarchical inheritance.



class B extends A;
class C extends A;



Code 3 : Hierarchical Inheritance.

Conclusion:

Hence, by performing this practical I learnt about the concepts of inheritance. I also created, debugged and executed Java programs on these concepts.