**PRACTICAL:17**

**AIM:** **Write a program in Java to demonstrate implementation of multiple inheritance using interfaces.**

# Multiple inheritance

# Multiple Inheritance is nothing but one class extending more than one class.

# Multiple Inheritance is basically not directly supported by many Object Oriented Programming languages such as Java, Small Talk , C# etc..

# As the Child class has to manage the dependency of more than one Parent class.

# But you can achieve multiple inheritance in Java using Interfaces.

# Interface

# An interface in java is a blueprint of a class. It has static constants and abstract methods.

# The interface in Java is a mechanism used to achieve abstraction.

# There can be only abstract methods in the Java interface, not method body.

# It is used to achieve abstraction and multiple inheritance in Java.

# Since java does not support multiple inheritance in case of class, but by using interface it can achieve multiple inheritance .

# Declaration of Interface:

# syntax:

# interface <interface\_name>

# {

# //Interface Body

# }

# Example:

# interface printable //interface declaration

# {

# //Interface Body

# }

# class Sample implements printable // implement interface

# {

# //Class Body

# }

**PROGRAM:**

interface Multiple\_inheritance

{

void display();

}

interface Multiple\_inheritance\_1

{

void display\_1();

}

class Child implements Multiple\_inheritance,Multiple\_inheritance\_1

{

public void display()

{

System.out.println("INRTERFACE 1");

}

public void display\_1()

{

System.out.println("INRTERFACE 2");

}

}

class P17\_7059

{

public static void main(String args[])

{

System.out.println("MAIN METHOD");

Child c1 = new Child();

c1.display();

c1.display\_1();

}

}

**OUTPUT:**

