Experiment Title – Constructors in JAVA

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Branch : CSE Section/Group : A

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Subject Name : JAVA Programming Lab Subject Code : 20CSP -219

1. Aim/Overview of the practical:

Different types of Inheritance in JAVA

1. Task to be done/ Which logistics used:



We need to program a class with different types of inheritances .

1. Algorithm/Flowchart (For programming based labs):

BEGIN BASE CLASS

METHOD DECLARATION

END BASE CLASS

BEGIN CHILD CLASS EXTENDS BASE

METHOD DECLARATION

MAIN FUNCTION

CREATING OBJECT OF CHILD CLASS

CALLING METHOD USING CHILD OBJECT

MAIN FUNCTION END

END CHILD CLASS

BEGIN CHILD1 CLASS EXTENDS CHILD

METHOD DECLARATION

MAIN FUNCTION

CREATING OBJECT OF CHILD1 CLASS

CALLING METHOD USING CHILD1 CLASS

MAIN FUNCTION END

END CHILD1 CLASS

BEGIN CHILD2 CLASS EXTENDS BASE

METHOD DECLARATION

MAIN FUNCTION

CREATING OBJECT OF CHILD2 CLASS

CALLING METHOD USING CHILD2 CLASS

MAIN FUNCTION END

END CHILD2 CLASS

MAIN FUNCTION END

1. Steps for experiment/practical/Code:

*public* *class* Base {

*public* *void* showBase()

    {

        System.out.println("Base class method");

    }

}

*public* *class* Child *extends* Base

{

*public* *void* showChild()

    {

        System.out.println("Child class method");

    }

*public* *static* *void* main(*String*[] args)

    {

*Child* obj = *new* Child();

        obj.showBase();

    }

}

*public* *class* Child1 *extends* Child {

*public* *void* showChild1()

    {

        System.out.println("Child1 class method");

    }

*public* *static* *void* main(*String*[] args)

    {

*Child1* obj = *new* Child1();

        obj.showChild1();

    }

}

*public* *class* Child2 *extends* Base{

*public* *void* showChild2()

    {

        System.out.println("Child2 method called");

    }

*public* *static* *void* main(*String*[] args)

    {

*Child2* obj = *new* Child2();

        obj.showChild2();

    }

}

1. Observations/Discussions/ Complexity Analysis:

By this we observed that there are multiple ways of inheriting classes like Single, Hierarchal etc . By using the word extends we can inherit a class to any other class .

1. Result/Output/Writing Summary:







Learning outcomes (What I have learnt):

1. Inheritances in JAVA .

2. Method calling in JAVA .

3. Initializing Objects .

4. Object initializations .

5. Access Specifiers .

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):



|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
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