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Course Name: C.S.E. (IoT CS BC)

Course code: CSL304

Year: S.E.

Semester: 3

Roll No.: 17

Experiment Evaluation Sheet

Experiment No.: 10

Experiment Name:

Program on abstract class and abstract methods.

Sr No.	Evaluation Criteria	Marks (Out of 9)	Performance Date	Correction Date and Signature of Instructor
1	Experiment Performance			
2	Journal Performance			
3	Punctuality			
Total				

Aim : Program on abstract class and abstract methods.

Software required : Java, Javac.

Theory :

Abstract class in Java :-

A class which is declared with the abstract keyword is known as an abstract class in Java. It can have abstract and non-abstract methods (method with the body).

Before learning the Java abstract class, let's understand the abstraction in Java first.

Abstraction in Java :

Abstraction is a process of hiding the implementation details and showing only functionality to the user.

Another way, it shows only essential things to the user and hides the internal details, for example, sending SMS where you type the text and send the message. You don't know the internal processing about the message delivery.

Abstraction lets you focus on what the object does instead of how it does it.

Abstract class in Java :

A class which is declared as abstract is known as an abstract class. It can have abstract and non-abstract methods. It needs to be extended and its method implemented. It cannot be instantiated.

Abstract Method in Java :

A method which is declared as abstract and does not have implementation is known as an abstract method.

Code 9.c :

```
abstract class Animal{
    public abstract void animalsound();
    public void sleep(){
        System.out.println("ZZZZZZZZZZ\n");
    }
}

class Pig extends Animal{
    public void animalsound(){
        System.out.println("weee weee\n");
    }
}

public class Abs {
    public static void main(String[] args) {
        Pig mypig = new Pig();
        mypig.animalsound();
        mypig.sleep();
    }
}
```

Output 10 :

```
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp10$ javac Abs.java
● student@csiot-ThinkCentre-M70s:~/CHETAN_I_007/OOPs/Exp10$ java Abs
weee weee

ZZZZZZZZZZ
```

Conclusion :

With this experiments we learn how to implement abstraction in java programming language.