

## 1A. Null Pointer Exception

2A. An exception is an event that disrupts the normal flow of the program. It is an object which is thrown at runtime. Exception Handling is the exception handling is to maintain the normal flow of the application. An exception normally disrupts the normal flow of the application. that is why we need to handle exceptions.

Exception we can handle by using five keywords : try, catch, throw, throws and final.

3A. The exception custom exceptions are used to customize the exception according to user need. Creating our own Exception is known as custom exception or user-defined exception.

4A. The encapsulation refers to the bundling of fields and methods inside a single class.

### Rules of Encapsulation

1.All variables must be private.

2.Add getters and setters

3.Class should be in public.

4.Class cannot be declared as final.

5A.The Polymorphism is a concept of performing a single action in different ways. Polymorphism is derived from 2 Greek words: poly and morphs. The word "poly" means many and "morphs" means forms. So polymorphism means many forms.

There are two types of polymorphism Are:

1.Runtime polymorphism.

2.compiletime polymorphism.

6A. The Overloading is a feature that allows a class to have more than one method having the same name.

```
public class OverLoading {  
    void Add(int a, int b) {  
        System.out.println(a+b);  
    }  
    void sub(double c, double d) {  
        System.out.println(c-d);  
    }  
}
```

```

    }
}

public class Tester {

    public static void main(String[] args) {

        OverLoading overloading = new OverLoading();

        overloading.Add(5, 10);

        overloading.sub(25.53, 15.25);

    }

}

```

7A.The overriding is a child class has its method implementation for the method already present in the parent class. overriding is a function that requires a subclass or child class to provide a variety of method implementations, that are already provided by one of its super classes or parent classes.

8A.OUTPUT Is args.

10A. The output is “X-workz provide java Enterprise application training”.

11A. Abstraction is a process of hiding the implementation details and showing only functionality to the user.

There are two ways to achieve abstraction

1.Abstract class

2.interface

By using interface we can achieve 100% abstraction

12A. There are two ways:

1.Variable Initialization:

Type of data that can be stored in this variable.

1. We need to give the variable

2.It is the initial values stored in the variable.

2.Assigning value by taking input

We will assign the value by taking the input which we required.

