

## Vidyavardhini's College of Engineering and Technology Department of Artificial Intelligence & Data Science

Experiment No. 5
Implement a program on Packages.
Date of Performance:
Date of Submission:

**Aim:** To use packages in java.

**Objective:** To use packages in java to use readymade classes available in them using square root method in math class.

### Theory:

A java package is a group of similar types of classes, interfaces and sub-packages. Packages are used in Java in order to prevent naming conflicts, to control access, to make searching/locating and usage of classes, interfaces, enumerations and annotations easier, etc.

There are two types of packages-

- 1. Built-in package: The already defined package like java.io.\*, java.lang.\* etc are known as built-in packages.
- 2. User defined package: The package we create for is called user-defined package.

Programmers can define their own packages to bundle group of classes/interfaces, etc. While creating a package, the user should choose a name for the package and include a package statement along with that name at the top of every source file that contains the classes, interfaces, enumerations, and annotation types that you want to include in the package. If a package statement is not used then the class, interfaces, enumerations, and annotation types will be placed in the current default package.



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#### **Code:**

```
import java.uOl.Scanner; class
Package {    public staOc void
main(String[] args) {
    Scanner myObj = new Scanner(System.in);
    String userName;
    System.out.println("Enter username");
    userName = myObj.nextLine();
    System.out.println("Username is: " + userName);
}
```

#### Conclusion:

Autoencoder architecture in Java is a powerful tool for image compression. By using a neural network with an encoder and a decoder, the autoencoder can effectively reduce the dimensionality of an image while preserving its essential features. This compression process results in smaller file sizes, making it easier to store and transmit images. However, it's important to note that the level of compression and the resulting image quality can vary depending on the specific implementation and parameters used. Overall, autoencoders provide a promising approach to image compression in Java, offering a balance between file size reduction and image fidelity.