GETTING FILE INFORMATION

AIM:

To write a java program to implement file information such as reads a file name from the user, displays information about whether the file exists, whether the file is readable, or writable, the type of file and the length of the file in bytes.

ALGORITHM:

1. Import the java packages.
2. By using Scanner class get the input during runtime.
3. By using File class method create a File object associated with the file or directory specified by pathname. The pathname can contain path information as well as a file or directory name.
4. The exists() checks whether the file denoted by the pathname exists. Returns true if and only if the file denoted by the pathname exists; false otherwise
5. The getAbsolutePath() returns the absolute pathname string of the pathname.
6. The canRead() checks whether the application can read the file denoted by the pathname. Returns true if and only if the file specified by the pathname exists and can be read by the application; false otherwise.
7. The canWrite() checks whether the application can modify to the file denoted by the pathname. Returns true if and only if the file system actually contains a file denoted by the pathname and the application is allowed to write to the file; false otherwise.
8. The length() returns the length of the file denoted by the pathname. The return value is unspecified if the pathname denotes a directory.
9. The endsWith() returns true if the given string ends with the string given as argument for the method else it returns false.
10. The program uses conditional operator to check different functionalities of the given file.

PROGRAM:

*//File Name should be **FileInfo.java***

```
import java.io.*; import
java. util.*; public class
FileInfo
{
```

```
 public static void main(String[] args) throws IOException
{
   Scanner in=new Scanner(System.in);

   System.out.print("\nEnter the FileName: ");
   String fName = in.next();
   File f = new File(fName);
   String result = f.exists() ? " exists." : " does not exist.";
   System.out.println("\nThe given file " +fName  + result);

   System.out.println("\nFile Location: "+f.getAbsolutePath());

   if(f.exists())
   {
      result = f.canRead() ? "readable." : "not readable.";
      System.out.println("\nThe file is " + result);

      result = f.canWrite() ? "writable." : "not writable.";
      System.out.println("\nThe file is " + result);

      System.out.println("\nFile length is " + f.length() + " in bytes.");

      if (fName.endsWith(".jpg") || fName.endsWith(".gif") || fName.endsWith(".png"))
      {
         System.out.println("\nThe given file is an image file.");
      }
      else if (fName.endsWith(".pdf"))
      {
         System.out.println("\nThe given file is an portable document format.");
      }
      else if (fName.endsWith(".txt"))
      {
         System.out.println("\nThe given file is a text file.");
      }
else
      {
         System.out.println("The file type is unknown.");
      }
   }
}
```

}

NOTE:

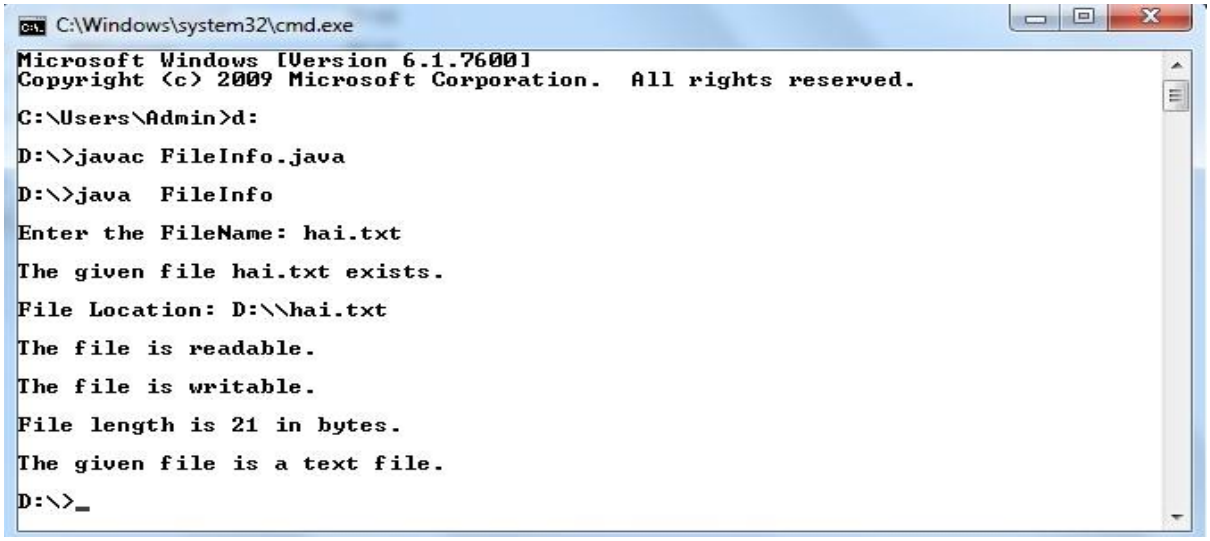
To Compile:

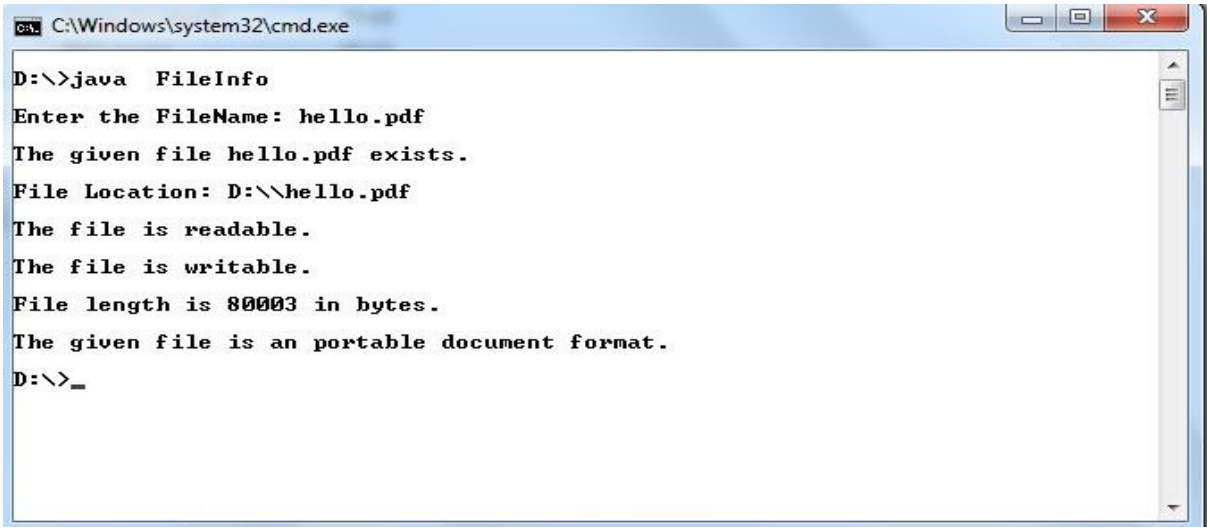
javac FileInfo.java To

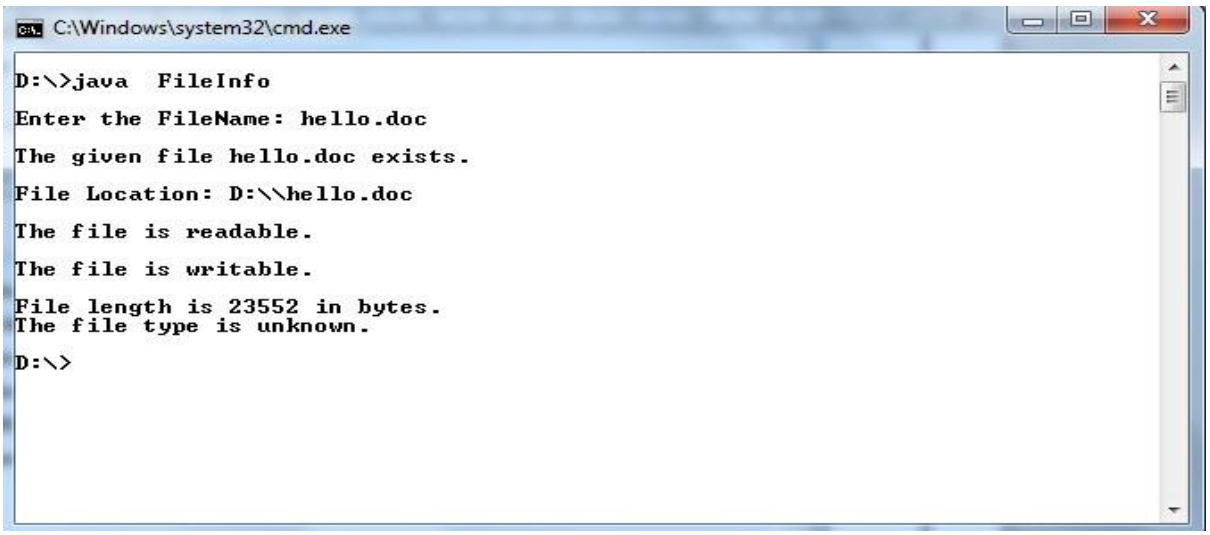
Run:

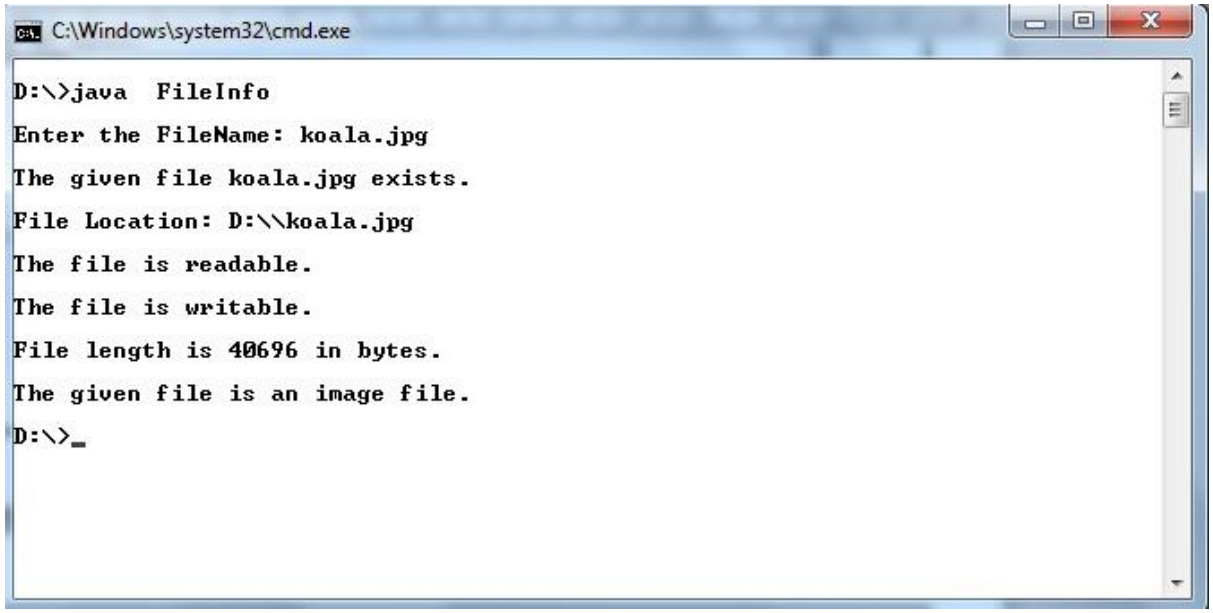
java FileInfo

OUTPUT:






C:\Windows\system32\cmd.exe
D:\>java FileInfo
Enter the FileName: hello.doc
The given file hello.doc exists.
File Location: D:\\hello.doc
The file is readable.
The file is writable.
File length is 23552 in bytes.
The file type is unknown.
D:\>


C:\Windows\system32\cmd.exe
D:\>java FileInfo
Enter the FileName: koala.jpg
The given file koala.jpg exists.
File Location: D:\\koala.jpg
The file is readable.
The file is writable.
File length is 40696 in bytes.
The given file is an image file.
D:\>

RESULT:

Thus the Implementation for getting file information has been successfully executed.