Department: BCA
Faculty Name: Ashish Kumar
Subject: JAVA (5th sem.)
Topic: **Java throw keyword**

Java throw keyword:

- The Java throw keyword is used to explicitly throw an exception.
- We can throw either checked or unchecked exception in java by throw keyword.
- The throw keyword is mainly used to throw custom exception.

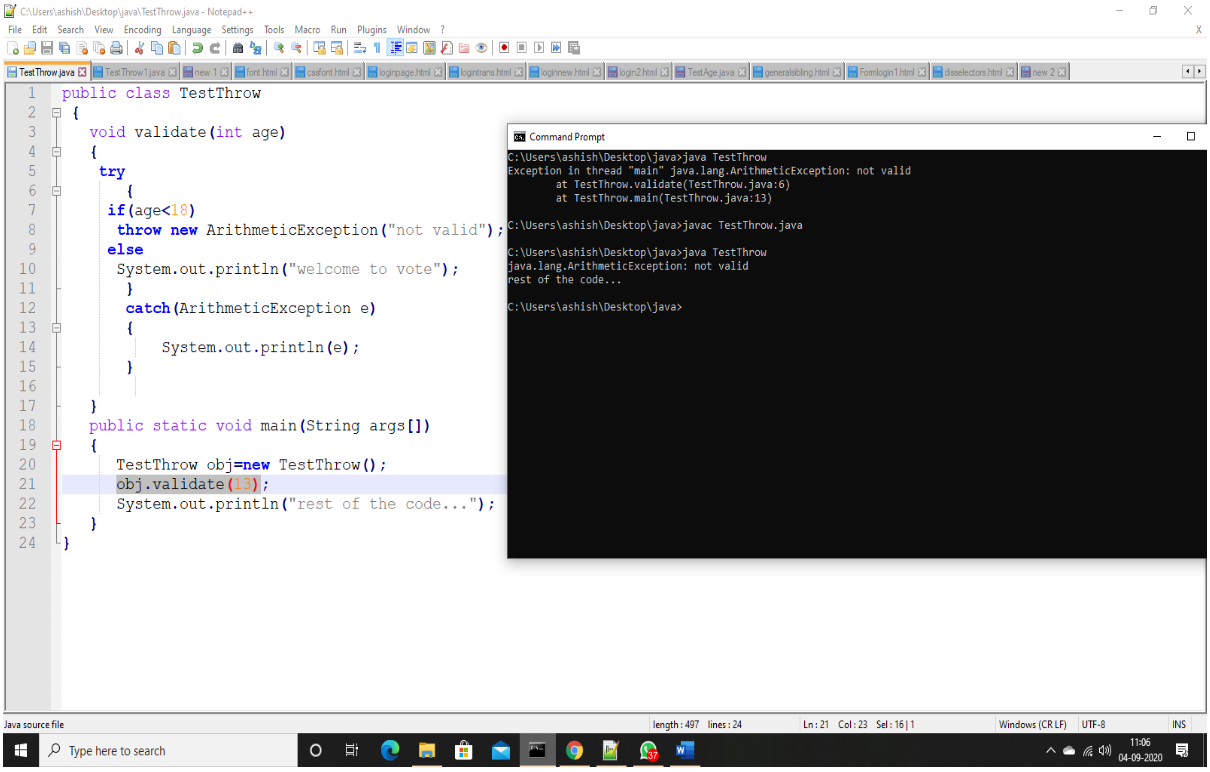
Syntax of java throw keyword:

throw exception;

or

throw new ExceptionClassName(msg);

Example:



```
public class TestThrow
 {
   void validate(int age)
   {
    try
       {
     if(age<18)
      throw new ArithmeticException("not valid");
     else
      System.out.println("welcome to vote");
       }
      catch(ArithmeticException e)
       {
           System.out.println(e);
       }

   }
   public static void main(String args[])
   {
      TestThrow obj=new TestThrow();
      obj.validate(13);
      System.out.println("rest of the code...");
   }
}
```

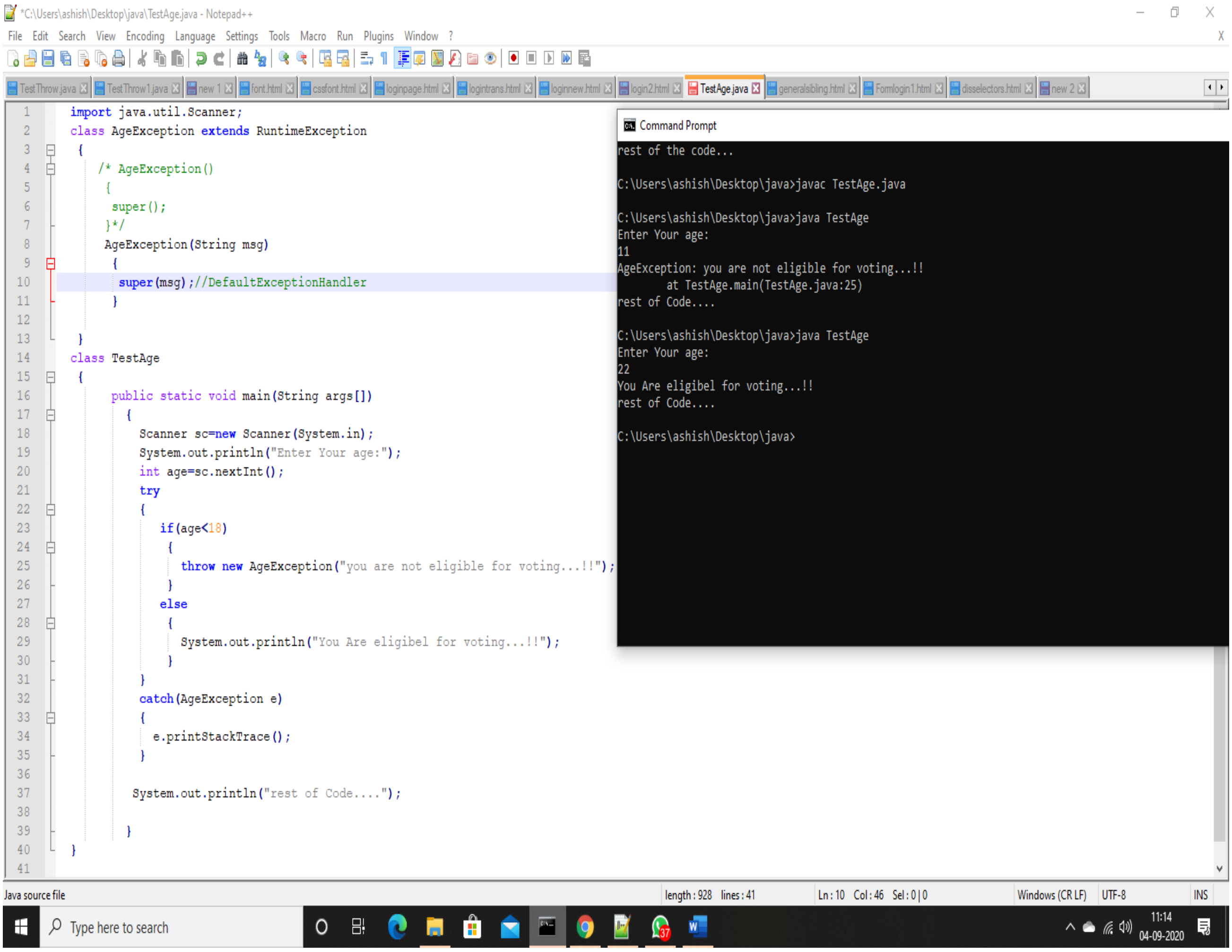
```
C:\Users\ashish\Desktop\java>java TestThrow
Exception in thread "main" java.lang.ArithmeticException: not valid
        at TestThrow.validate(TestThrow.java:6)
        at TestThrow.main(TestThrow.java:13)

C:\Users\ashish\Desktop\java>javac TestThrow.java

C:\Users\ashish\Desktop\java>java TestThrow
java.lang.ArithmeticException: not valid
rest of the code...

C:\Users\ashish\Desktop\java>
```

Example:



```
import java.util.Scanner;
class AgeException extends RuntimeException
 {
    /* AgeException()
     {
      super();
     }*/
     AgeException(String msg)
      {
       super(msg);//DefaultExceptionHandler
      }

 }
class TestAge
 {
        public static void main(String args[])
          {
            Scanner sc=new Scanner(System.in);
            System.out.println("Enter Your age:");
            int age=sc.nextInt();
            try
            {
               if(age<18)
                {
                  throw new AgeException("you are not eligible for voting...!!");
                }
               else
                {
                  System.out.println("You Are eligibel for voting...!!");
                }
            }
            catch(AgeException e)
            {
              e.printStackTrace();
            }

           System.out.println("rest of Code....");

          }
 }
```

```
rest of the code...

C:\Users\ashish\Desktop\java>javac TestAge.java

C:\Users\ashish\Desktop\java>java TestAge
Enter Your age:
11
AgeException: you are not eligible for voting...!!
        at TestAge.main(TestAge.java:25)
rest of Code....

C:\Users\ashish\Desktop\java>java TestAge
Enter Your age:
22
You Are eligibel for voting...!!
rest of Code....

C:\Users\ashish\Desktop\java>
```