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| A picture containing drawing, stop, room  Description automatically generated | Core Java  Practical #7 | | |
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| **Subject/Course:** | Core Java | | |
| **Topic** | Exception Handling ,Multithreading and File Handling | | |
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| User defined Exception | | | |
| 1. Create a class student with attributes roll no, name, age and course. Initialize values through parameterized constructor. If age is not between 15 and 21 then generate a user defined exception “Age not within the range”. | | | |
| Student Class :  package practical\_08;    class AgeNotInRange extends Exception{  String msg;    AgeNotInRange(String msg){  this.msg=msg;  }    void getMsg(){  System.out.println(msg);  }    }    public class student {  int rollno,age;  String name,course;    public student(int rollno, int age, String name, String course) {  this.rollno = rollno;  this.age = age;  this.name = name;  this.course = course;  }      public void check(){    try{  if(age>15 && age<=21){  System.out.println("Roll no : " + rollno);  System.out.println("Age : " + age);  System.out.println("Name : " + name);  System.out.println("Course : " + course);    }    else{  throw new AgeNotInRange("Not in a range ");  }  }  catch(AgeNotInRange a){  a.getMsg();    }  }      }  Main Class :  package practical\_08;    public class Practical\_08 {    public static void main(String[] args) {  student s1=new student(21,25,"bruce","bscit");  s1.check();  }    }  O/P : | | | |
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| **Multithreading** | | | |
| 1. Write a Java program for generating 4 threads to do the following operations.   (a)getting n numbers  (b)printing even numbers  (c)printing odd numbers  (d)printing square of a numbers | | | |
| package practical\_08;  import java.io.\*;  public class Practical\_08 {    public static void main(String[] args) {  getnum g1=new getnum();  g1.start();    even e1=new even();  e1.start();    odd o1=new odd();  o1.start();    square s1=new square();  s1.start();      }    }    class getnum extends Thread{  public void run(){  int a[]={1,3,4,5,6};  for(int x:a){  System.out.println("All numbers : " +x);  }  }  }        class even extends Thread{  public void run(){  int a[]={1,3,4,5,6,};  for(int x:a){  if(x%2==0){  System.out.println("Even no. : "+x);  }  }  }  }    class odd extends Thread{  public void run(){  int a[]={1,3,4,5,6,};  for(int x:a){  if(x%2!=0){  System.out.println("Odd no. : "+x);  }  }  }  }    class square extends Thread{  public void run(){  int a[]={1,3,4,5,6,};  for(int x:a){  System.out.println("Squares : "+x\*x);    }  }  }  O/P :  image | | | |
| **File Handling** | | | |
| Write a program to copy the content of file “file1.txt” to “file2.txt”.  package practical\_08;  import java.io.\*;  public class Practical\_08 {    public static void main(String[] args) {  try{    byte b[]=new byte[100];  FileInputStream fis=new FileInputStream("bruce1.txt");  FileOutputStream fos=new FileOutputStream("bruce2.txt");  fis.read(b);  fos.write(b);  fos.close();  fis.close();      }  catch(Exception e){  e.getMessage();  }  }    }  O/P :  File 1    File 2 | | | |