

Aim: To create a user defined exception class.

Theory:

- Custom Exception: Custom exceptions allow developers to create their own exception classes tailored to specific application requirements.
- By extending existing exception classes developers can create custom exception hierarchies.
- To create a custom exception, developers define a new class that extends exception / any of its subclasses.
- They can add additional fields and methods to provide more context about the exception.

Procedure:

program 1:

```
class InvalidAgeException extends Exception  
{
```

```
    InvalidAgeException (String s)  
    {
```

```
        super(s);
```

```
    }
```

```
}
```

```
class Main
```

```
{
```

```
    static void validate(int age) throws InvalidAgeException
```

{

if (age < 18)

{

throw new InvalidAgeException("Age < 18,
you cannot vote");

}

else

{

System.out.println("welcome to voting");

}

}

public static void main (String [] args)

{

try

{

validate (17);

}

catch (Exception e)

{

System.out.println("exception occured" + e.getMessage());

}

}

}

output:

exception occurred; Age < 18 you cannot vote.

program 2:

```
class InvalidRollException extends Exception
```

```
{  
    InvalidRollException (String s)
```

```
{  
    Super (s);  
}
```

```
}
```

```
class Main
```

```
{
```

```
    static void validate (int roll) throws InvalidRollException
```

```
{  
    if (roll < 0)
```

```
{  
        throw new InvalidRollException ("roll no. cannot  
        be -ve");
```

```
    }  
    else  
    {  
        System.out.println ("valid roll no.");
```

```
    }  
}
```

```
{
```

```
    try  
    {  
        validate (-12);
```

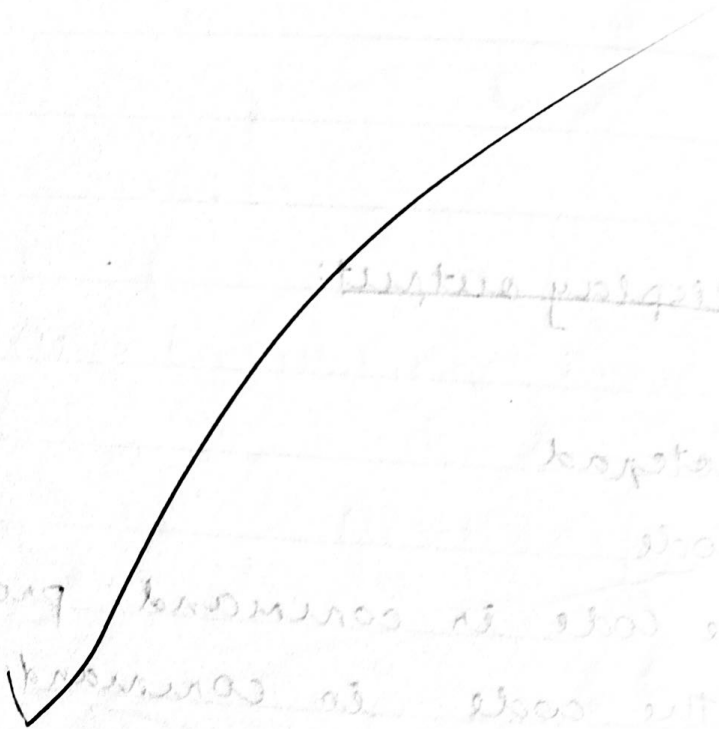
```
    }  
    catch (Exception e)  
    {  
        System.out.println("Exception occurred "+ e.getMessage());  
    }  
}
```

Steps to display output:

1. Start
2. Open notepad
3. Write code
4. compile code in command prompt.
5. Run the code in command prompt.
6. Check output.
7. Stop.

output:

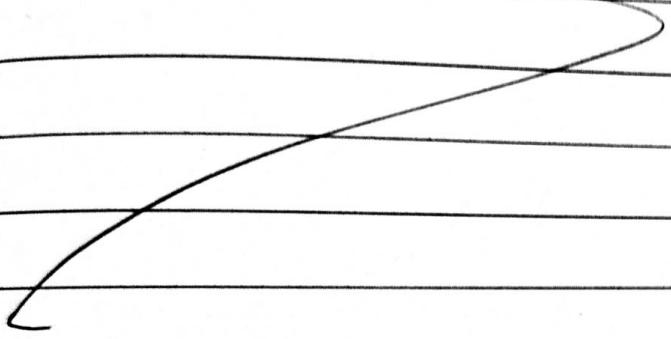
exception occurred, rollup cannot be -ve



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Conclusion:

Hence, we have created & implemented
a user defined exception class.



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9/10/24