Department of Computer Science and Engineering
Data Science

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Semester: III	**Student ID: 21107009**
Class / Branch: SE Data Science	**Date Of Performance: 29/09/2022**
Subject: OOPJ Lab	**Date Of Submission: 29/09/2022**
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Experiment No. 9

Aim:- Write a Java program for exception handling

Program 9(a): Using try and catch block

```java
public class exp9

{

public static void main(String[] args)

{

try

{

int[] myNumbers={1,2,3};

System.out.println("inside try block"+myNumbers[10]);

}


catch(Exception e)
```

```
{

System.out.println("Something went wrong");

}


finally

{

System.out.println("The 'try catch' is finished.");

}

}

}
```


Program 9(b): Using throw expression

```
public class exp9

{

static void checkAge(int age)

{

if(age<18)

{

throw new ArithmeticException("Access Denied - You must be at least 18 years old.");

}
```

```java
else

{

System.out.println("Access granted- Your are old enough!");

}

}


public static void main(String[] args)

{

checkAge(15);

}

}
```

Program 9(c): Using throws expression

```java
import java.io.IOException;

class exp9

{

void m()throws IOException

{

throw new IOException("device error");

}
```

```
void n()throws IOException

{

m();

}


void p()

{

try

{

n();

}

catch(Exception e)

{

System.out.print("exception handled");

System.out.println();

}

}


public static void main(String args[])

{
```

```
exp9 obj=new exp9();

obj.p();

System.out.println("normal flow..");

}

}
```

Output:-

Program 9(a):

```
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ javac exp9.java
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ java exp9
Something went wrong
The 'try catch' is finished.
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ ▮
```

Program 9(b):

```
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ javac exp9.java
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ java exp9
Exception in thread "main" java.lang.ArithmeticException: Access Denied - You must be at least 18 years old.
        at exp9.checkAge(exp9.java:7)
        at exp9.main(exp9.java:17)
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ ▮
```

Program 9(c):

```
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ javac exp9.java
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$ java exp9
exception handled
normal flow..
apsit@apsit-HP-280-Pro-G6-Microtower-PC:~$
```