

DAY10:

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- 1.Exception
- 2.throw and throws
- 3.User define exception

QUESTIONS (Theory)

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- 1.what is Exception?
- 2.Explain about types of Exception?
- 3.Difference between checked exception and unchecked exception?
- 4.What are the differences between exception and error?
- 5.What is the super class for Exception and Error?
- 6.Exceptions are defined in which java package
- 7.What is throw keyword in java?
- 8.Can we have try block without catch block?
- 9.Can we write multiple catch blocks under single try block?
- 10.How to write user defined exception or custom exception in java?
- 11.What are the different ways to print exception message on console?
- 12.What are the differences between final finally and finalize in java?
- 13.Can we write return statement in try and catch blocks?
- 14.Can we write return statement in finally block?
- 15.What are the differences between throw and throws?
- 16.What are the Exception Handling Keywords in Java?
- 17.Explain Java Exception Hierarchy?
- 18.How to create custom Exception?

QUESTIONS (Programs)

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QUESTION 1:

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Description : Find the output for the program:

```
public class Test
{
    public static void main(String[] args)
    {
        try
        {
            System.out.printf("1");
            int sum = 9 / 0;
            System.out.printf("2");
        }
        catch(ArithmeticException e)
        {
            System.out.printf("3");
        }
        catch(Exception e)
        {
            System.out.printf("4");
        }
        finally
        {
            System.out.printf("5");
        }
    }
}
```

QUESTION 2:

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Description : Find the output for the program:

```
public class Test
{
    private void m1()
    {
        m2();
        System.out.printf("1");
    }
    private void m2()
    {
        m3();
        System.out.printf("2");
    }
    private void m3()
    {
        System.out.printf("3");
    }
    try
    {
        int sum = 4/0;
        System.out.printf("4");
    }
    catch(ArithmeticException e)
    {
        System.out.printf("5");
    }

    System.out.printf("7");
}
public static void main(String[] args)
{
    Test obj = new Test();
    obj.m1();
}
}
```

QUESTION 3:

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Description : Find the output for the program:

```
public class Test
{
    public static void main(String[] args)
    {
        try
        {
            System.out.printf("1");
            int data = 5 / 0;
        }
        catch(ArithmeticException e)
        {
            System.out.printf("2");
            System.exit(0);
        }
        finally
        {
            System.out.printf("3");
        }
        System.out.printf("4");
    }
}
```

```
}  
}
```

QUESTION 4:  
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Description : Find the output for the program:

```
public class Test  
{  
    public static void main(String[] args)  
    {  
        try  
        {  
            System.out.printf("1");  
            int data = 5 / 0;  
        }  
        catch(ArithmeticException e)  
        {  
            Throwable obj = new Throwable("Sample");  
            try  
            {  
                throw obj;  
            }  
            catch (Throwable e1)  
            {  
                System.out.printf("8");  
            }  
        }  
        finally  
        {  
            System.out.printf("3");  
        }  
        System.out.printf("4");  
    }  
}
```

QUESTION 5:  
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Description : Find the output for the program:

```
import java.io.EOFException;  
import java.io.IOException;  
  
public class Test  
{  
    public static void main(String[] args)  
    {  
        try  
        {  
            System.out.printf("1");  
            int value = 10 / 0;  
            throw new IOException();  
        }  
        catch(EOFException e)  
        {  
            System.out.printf("2");  
        }  
        catch(ArithmeticException e)  
        {  
            System.out.printf("3");  
        }  
        catch(NullPointerException e)
```

```
{
  System.out.printf("4");
}
catch (IOException e)
{
  System.out.printf("5");
}
  catch (Exception e)
{
  System.out.printf("6");
}
}
```