

EXCEPTION

1. what is exception

Exception is Run time error, abnormal condition that arises in code at runtime. Object of type exception is created and thrown in the method which caused exception. Once an exception is thrown, program control transfers out of the try block into the catch block. Once the catch block has executed, program control continues with the next line in program. (RTEACOOO)

2. what is the parent class of EXCEPTION

THROWABLE is parent of EXCEPTION and ERROR classes, StackOverflow, out of memory, JVM errors are example of ERROR. EXCEPTION class doesn't have methods of its own, it inherits methods of THROWABLE class.

3. A subclass catch must come before a superclass catch in multiple catch clauses. If not unreachable compile time error will be thrown.

4. what is THROW keyword

THROW is used to throw an exception explicitly. The flow of execution stops immediately after the THROW statement.

```
class DemoClass {  
    static void demoMethod() {  
        try {  
            throw new NullPointerException("demo");  
        } catch (NullPointerException e) {  
            throw e;  
        }  
    }  
}
```

```
psvm(String args[]){  
    try{  
        demoMethod();  
    } catch (NullPointerException e){  
        SOT(" "+e)  
    }  
}
```

5. what is THROWS keyword

THROWS keyword lists the types of exceptions that a method may throw except ERROR/RunTimeException.

```
class DemoClass {  
    static void demoMethod() throws IllegalAccessException {  
        throw new IllegalAccessException("demo");  
    }  
    psvm(String args[]){  
        try{  
            demoMethod();  
        } catch ( IllegalAccessException e){  
            SOT(" "+e)  
        }  
    }  
}
```

6. what is FINALLY keyword

What is finally block? The "finally" block is used to execute the important code of the program. It is executed whether an exception is handled or not. In other words, we can say that finally block is the block which is always executed. Finally block follows try or catch block. If you don't handle the exception, before terminating the program, JVM runs finally block, (if any). The finally block is mainly used to place the cleanup code such as closing a file or closing a connection. Here, we must know that for each try block there can be zero or more catch blocks, but only one finally block. The finally block will not be executed if program exits (either by calling System.exit() or by causing a fatal error that causes the process to abort).

7. what is custom exception

```
class DemoClass extends Exception {  
    static void demoMethod(int a) {  
        try {  
            throw new NullPointerException("demo");  
        } catch (NullPointerException e) {  
            throw e;  
        }  
    }  
}
```

```
psvm(String args[]){  
    try{  
        b demoMethod();  
    } catch(NullPointerException e){  
        SOT(" "+e)  
    }  
}
```