

## Assignment - 28

1. can static an abstract method have the static qualifier?

- If we declare a method in class abstract to use it, you must override this method in the subclass. But overriding is not possible with static method, Therefore, an abstract method cannot be static.

2. What kind of thread is the garbage collector thread?

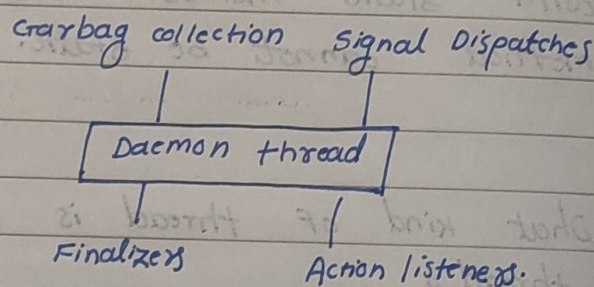
- Garbage collector is a Daemon thread that keeps running in background. Basically it frees up the heap memory by destroying the unreachable objects.
- Unreachable objects are the ones that are no longer referenced by any part of program.



3. what is daemon thread?

• Daemon thread in Java is a low-priority thread that performs background operations such as garbage collection, finalizers, action listeners, signal dispatchers, etc.

• daemon thread is also a service provider thread that helps the user thread.



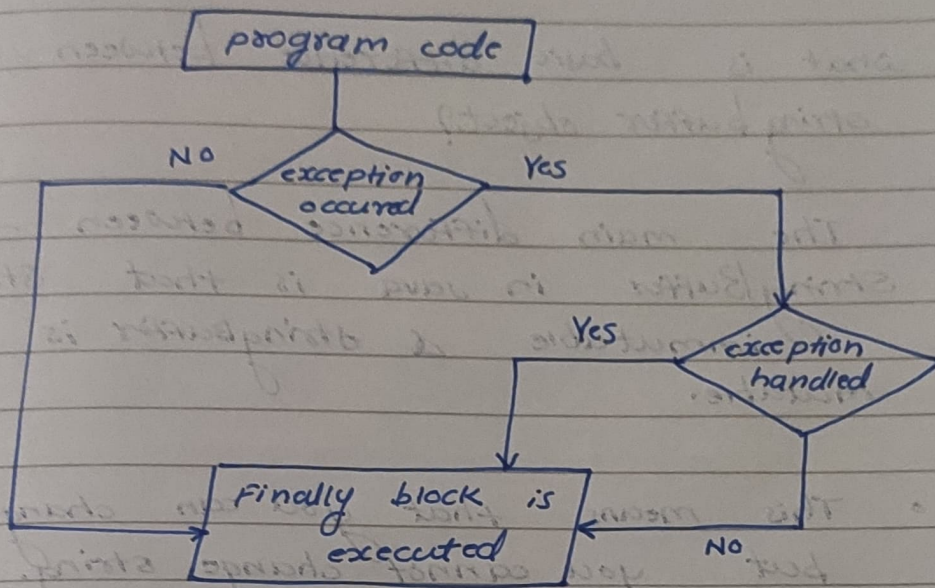
4. what is the use of finally block?

• Java finally block is used to execute important part of code such as closing connection, etc.

• It is a block of code that executes whether an exception is handled or not.

Therefore, it contains all the necessary statements that need to be printed regardless of whether an exception occurs or not.





### Finally block execution

5. what is mutable object and immutable object?

• Mutable object:

- The mutable objects are objects whose value can be changed after initialization.

• Immutable object:

- Immutable objects are objects whose value cannot be changed after initialization.

eg. - final (object with final keyword)



Q. what is basic difference between String & StringBuffer object?

- The main difference between String & StringBuffer in java is that String is immutable & StringBuffer is mutable.

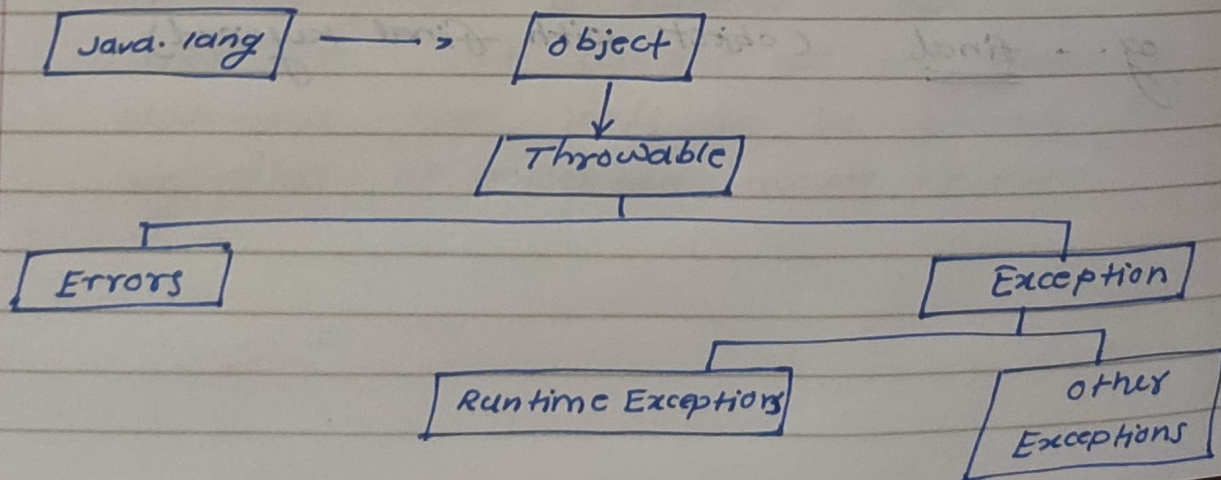
- This means that you can change StringBuffer but you cannot change String.

- String is slower than StringBuffer while performing concatenation.

T. what is the base class for Error & Exception?

- Throwable

- All error and exception types are subclasses of Throwable class.





8. What are the inbuilt packages in Java?

- Packages in Java are used to avoid naming conflict and to control the access of class, interface, subclasses, etc.
- Package is defined as group of similar types of classes, subclasses, interfaces or enumerations, etc.

• Packages are divided into two parts:

1. Built in packages
2. User-defined packages.

• Built in packages: java.lang, awt, util

9. Is JVM a compiler or Interpreter?

• JVM is both compiler & Interpreter.

• Java code is converted into class then it is converted to bytecode. This bytecode is accepted by Interpreter then OS then microprocessors.



10. What is final keyword in java?

- Final keyword is same as const in C++.

- The variable declared with final keyword is immutable means we cannot change the value of it.

- Final keyword is used to indicate that the variable, method, class cannot be modified or extended.