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Subject: JAVA (5th sem.)
Topic: **Java throws keyword**

Java throws keyword:

- ➢ The **Java throws keyword** is used to declare an exception.
- ➢ It gives an information to the programmer that there may occur an exception so it is better for the programmer to provide the exception handling code so that normal flow can be maintained.
- ➢ Exception Handling is mainly used to handle the checked exceptions.
- ➢ If there occurs any unchecked exception such as NullPointerException, it is programmers' fault that he is not performing check-up before the code being used.

Syntax of java throw:

return_type method_name() **throws** exception_class_name{
//method code
}
Example:

Difference between throw and throws in Java:

There are many differences between throw and throws keywords. A list of differences between throw and throws are given below:

No.	throw	throws
1)	Java throw keyword is used to explicitly throw an exception.	Java throws keyword is used to declare an exception.
2)	Checked exception cannot be propagated using throw only.	Checked exception can be propagated with throws.
3)	Throw is followed by an instance.	Throws is followed by class.
4)	Throw is used within the method.	Throws is used with the method signature.
5)	You cannot throw multiple exceptions.	You can declare multiple exceptions e.g. public void method()throws IOException, SQLException.

Important point:

throws use in checked exception only, because:

- **unchecked Exception:** under our control so correct our code.
- **error:** beyond our control e.g. we are unable to do anything if there occurs VirtualMachineError or StackOverflowError.

Note: it is used to declare the exception. It gives an information to the caller method that there may occur an exception so it is better for the caller method to provide the exception handling code so that normal flow can be maintained.