1. Using examples, distinguish between integration tests and unit tests.

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| **Integration tests** | **Unit tests** |
| Integration tests are tests carried out on a group of unit tests | Unit tests are tests carried out on individual components /units of a software |

The example is bundled within Question1 folder.

2. What are checked and unchecked exceptions? When do you use them? Explain those

using examples in code.

**Answer**:

a. **Checked exceptions** are exceptions which must be handled at compile time .They are also called **Compile time Exceptions** . These must be handled by the programmer.For example reading a file from a specified path

Please see ReadAFile.java example in Question2 Folder

b. **Unchecked exceptions** are exceptions which occur at code execution time. They are also called **Runtime Exceptions.** They may or may not be handled by the programmer. For example a simple program taking in numbers for calculation may take in wrong types which causes an error. The programmer may handle or not handle this .

See example Enter\_A\_Number\_checked.java and Enter\_A\_Number\_Unchecked.java in Question2 Folder for comparisons