Maven is a widely used build automation and project management tool. It is used to manage the build lifecycle of a software project, including tasks such as compiling source code, managing dependencies, and packaging artifacts.

## Steps to install

- 1) Download Maven from the official website
- 2) Follow the installation instructions for your operating system.

# Create a Maven Project:

- Open Eclipse IDE.
- Go to "File" -> "New" -> "Other...".
- In the "Select a wizard" dialog, expand "Maven" and select "Maven Project".
- Click "Next".
- Choose "Create a simple project" and click "Next".
- Enter the "Group Id" and "Artifact Id" (e.g., com.example and myhibernateproject).
- Click "Finish".

# Configure Hibernate Dependency:

- Open the pom.xml file in the project.
- Add the Hibernate dependencies to the <dependencies> section.

For example, these dependencies are on what I am currently working on for my project

```
cproject xmlns="http://maven.apache.org/POM/4.0.0"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">
      <modelVersion>4.0.0</modelVersion>
      <groupId>com.guru
      <artifactId>HostelManagementSystem</artifactId>
      <version>0.0.1-SNAPSHOT</version>
      <packaging>jar</packaging>
      <name>HostelManagementSystem
      <url>http://maven.apache.org</url>
      cproperties>
            project.build.sourceEncoding>UTF-8/project.build.sourceEncoding>

      <dependencies>
            <!-- https://mvnrepository.com/artifact/org.hibernate/hibernate-core
-->
            <dependency>
                  <groupId>org.hibernate
                  <artifactId>hibernate-core</artifactId>
                  <version>5.6.15.Final
            </dependency>
```

## Create Hibernate Configuration File:

- Create a hibernate.cfg.xml file in the src/main/resources directory to configure Hibernate.
- Example configuration:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration SYSTEM</pre>
"http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
   <session-factory>
         cproperty name =
"connection.driver_class">com.mysql.cj.jdbc.Driver
         cproperty name =
"connection.url">jdbc:mysql://localhost:3306/hostelmanagementsystem</property>
         cproperty name = "connection.username">root
         cproperty name = "connection.password">root/property>
         property
name="dialect">org.hibernate.dialect.MySQL8Dialect/property>
         cproperty name="hbm2ddl.auto">create
         cproperty name="show_sql">true
         <mapping class="com.guru.entities.Student" />
         <mapping class="com.guru.entities.Block" />
         <mapping class="com.quru.entities.Room" />
   </session-factory>
</hibernate-configuration>
```

#### Write Hibernate Entities:

• Create Java classes representing your entities (e.g., com.example.model.Student) and annotate them with Hibernate annotations.

