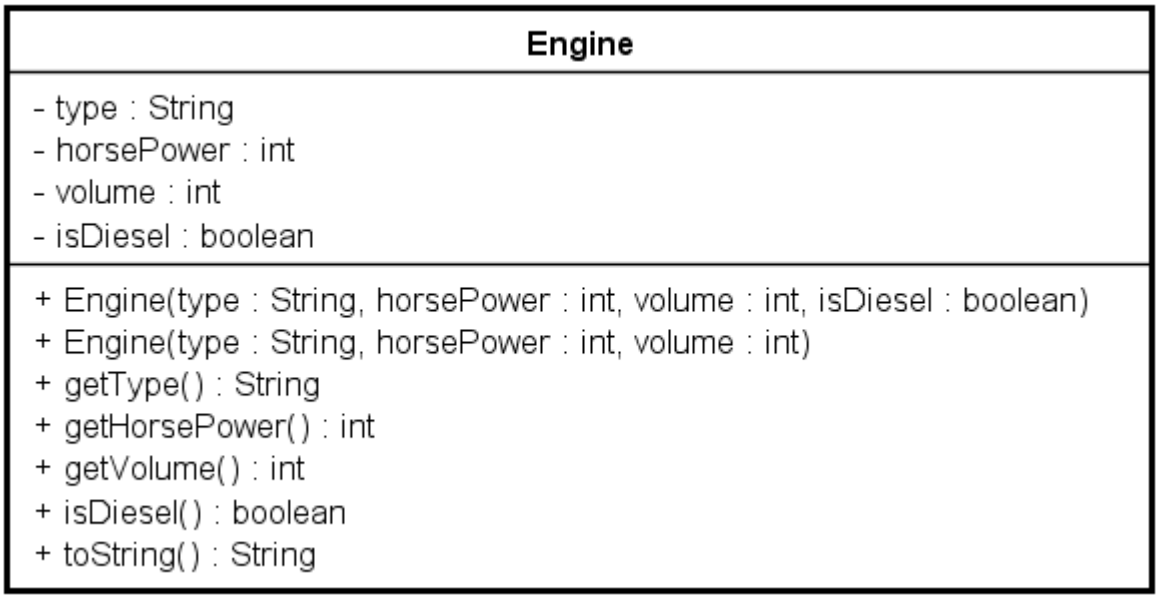
Exercise: Engine, version 1



Create a new module in IntelliJ and name it `Engine_v1`

Create a class called `Engine` that represents a vehicle engine with a type, horsepower, volume and a boolean storing the information if it is a diesel engine. Instance variable names and types can be seen in the UML class diagram. The class `Engine` has the following methods (see the UML class diagram)

a) A four-argument constructor for all four instance variables
b) A three-argument constructor with values for type, horsepower and volume. Set the engine to a diesel engine.
c) Getters for all four instance variables.
d) A method toString() returning one string with values for all 4 instance variables. You decide the format of the string.

Example: An engine for a Porche 911:

```
Type = 6-cylinder, twin-turbo
Horsepower = 420
Volume in m3 = 3000
isDiesel = false (it is a petrol engine)
```

Implement a test class with a main method for your class `Engine` (name the class `EngineTest`). Do at least the following:

1. Read type, horsepower and volume from keyboard and create an `Engine` object. Use the value `true` for isDiesel.
2. Print out the result from each of the four getter methods
3. Print out the object using method `toString`
4. Read type, horsepower and volume from keyboard and create another `Engine` object. This time, use the value `false` for isDiesel.
5. Print out the result from each of the four getter methods and from method `toString`

Is the output as expected?