Name & Surname:

Student ID:

# CE 223 Database Systems

#### Lab 3 - Preliminary

### Import the shıps database provided on the website of the course and write the following queries in SQL. Fill in the tables after each question. If a query results in more than 10 rows (tuples) give only the first five and last five rows and the number of rows returned. Note that you can check the exercises 2.3.2 (page 37) and 2.4.3 (page 55) from course book to understand the schema better.

1. Find the ships heavier than 35000 tons (displacement).

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find for each class the year in which the first ship of that class was launched.

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find the names of all ships whose name consists of three or more words.

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find those countries that have both battleships and battlecruisers.

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find for each class the number of ships of that class sunk in battle.

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. List all the ships mentioned in the database. (Remember that all these ships may not appear in the Ships relation.)

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find the average number of guns of battleship classes.

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. Find the average number of guns of battleships (Note the difference between this one and the previous one; do we weight a class by the number of ships of that class or not?)

|  |
| --- |
| SQL Query |
|  |
| Result Rows |
|  |

1. The two British battleships of the Nelson class – Nelson and Rodney – were both launched in 1927, had 16-inch guns and a displacement of 34000 tons. Insert these facts into the database.

|  |
| --- |
| SQL Query |
|  |
| Inserted Rows |
|  |

1. Delete from Ships relation all ships sunk in battle

|  |
| --- |
| SQL Query |
|  |
| Deleted Rows |
|  |