Notes on the Development Environment

- In order to compile and run your programs you will need a compiler (javac) and a runtime virtual machine (java). Both tools are part of the Java Development Environment (JDK).
- The JDK is installed on all lab machines in Bliss. Those of you who plan to write your programs on your own laptops and desktops should download the appropriate version of JDK 8 from Moodle.
- Detailed instructions for installation of the JDK may be found on the Moodle site as well. Please read and follow the detailed instructions for verifying the installation.

Exercises

1. Write a program **Arrows.java** that draws the following arrows. You should write the appropriate static methods to show structure and eliminate redundancy in your solution.

```
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```

2. Write a program **Logo.java** that draws the following logo.

```
    ___     ___  ___  ___   .    .   ____
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   |____| |___   |    | / |      |   |    |
   |    | |      |    | \ |      |   |    |
   |___/  |___  ___ |  \  \__/      |    |
```
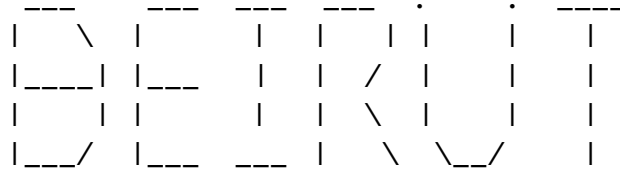
3. Write a program **RocketShip.java** that draws the following output (see below). You should write the appropriate static methods to show structure and eliminate redundancy in your solution.

```
       /++\
      //++\\
     ///++\\\
     |-*-*-*-*|
     |o/\oo/\o|
     |/\/\/\/\|
     |\/\/\/\/|
     |o\/oo\/o|
     |-*-*-*-*|
     |\/\/\/\/|
     |o\/oo\/o|
     |o/\oo/\o|
     |/\/\/\/\|
     |-*-*-*-*|
       /++\
      //++\\
     ///++\\\
```

4. Write a program **Draw.java** that draws the following output (see below). You should write the appropriate static methods to show structure and eliminate redundancy in your solution.

```
*----*
/    /
\    \
/    /
\    \
*----*

*----*
/    /
\    \
/    /
\    \
*----*
```

Submission Instructions and Guidlines

- Your submission must consist of a single zip folder that contains four `.java` files only (**Logo.java**, **Arrows.java** **RocketShip.java**, **Draw.java**). No additional files should exist in the .zip folder.
- Include a comment at the beginning of your program with basic information about yourself and a description of the program. Include also a comment at the start of each method.
- The name of the zip file must adhere to the following naming convention s#_A1_*netid*, where # stands for your section number (between 1 and 12) and *netid* stands for your AUBnet user name. For example, if your AUBnetid is abc65 and you are in section 4, you should submit the following file: s4_A1_abc65.zip. The zip files will be processed automatically so please make sure you use this naming convention.
- **Failing to follow these guidelines will result in deducting marks form your grade.**