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### Drawing Shapes with chars Using Functions

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This assignment was designed to exercise selection, repetition, and functions. Write a program that draws the following basic shapes using ASCII characters:

1. square
2. right triangle
3. equilateral triangle
4. upsidown triangle

The program, `hw05.cpp`, should take a number (`int`), a keyboard character (`char`), and a choice among the four shapes, and draw the shape to the screen. Code the functions `squ()`, `tri()`, `pyr()`, and `ryp()` to perform the drawings and `menu()` to display the choices. Place the code that implements each function in individual (separate) files called `squ.cpp`, `tri.cpp`, `pyr.cpp`, `ryp.cpp`, and `menu.cpp` respectively. Use the exact names shown above since part of your home work grading will be automated. Example of user interaction:

```
drb@nest:~/hw/05$ ./hw05
Enter your choice of shape:
```

1. square
2. right triangle
3. triangle
4. upsidown triangle
5. exit the program

```
choice: 3
dimension (2-20): 4
character: ^
```

```
  ^
 ^ ^
^ ^ ^
^ ^ ^ ^
```

Enter your choice of shape:

1. square
2. right triangle
3. triangle
4. upsidown triangle
5. exit the program

choice: 4

dimension (2-20): 8

character: V

```
V V V V V V V V
 V V V V V V V
  V V V V V V
   V V V V V
    V V V V
     V V V
      V V
       V
        V
```

Enter your choice of shape:

1. square
2. right triangle
3. triangle
4. upsidown triangle
5. exit the program

choice: 2

dimension (2-20): 5

character: L

```
L
L L
L L L
L L L L
L L L L L
```

Enter your choice of shape:

1. square
2. right triangle
3. triangle
4. upsidown triangle
5. exit the program

choice: 5

Create a typescript output (using the command `script`) issuing the following sequence of commands.

1. user@host: \$ `script hw05.scr`
2. user@host: \$ `date`
3. user@host: \$ `ls -l`
4. user@host: \$ `g++ -c menu.cpp -o menu.o`
5. user@host: \$ `g++ -c squ.cpp -o squ.o`
6. user@host: \$ `g++ -c tri.cpp -o tri.o`
7. user@host: \$ `g++ -c pyr.cpp -o pyr.o`
8. user@host: \$ `g++ -c ryp.cpp -o ryp.o`
9. user@host: \$ `g++ hw05.cpp -o hw05 squ.o tri.o pyr.o ryp.o menu.o`
10. user@host: \$ `./hw05`
11. ... interact with the program as shown above
12. user@host: \$ `ctrl-d` // hold down control and toggle d
13. Script done, output file is hw05.scr
14. user@host: \$ `tar cvf hw05.tar hw05.scr hw05.h hw05.cpp squ.cpp tri.cpp pyr.cpp ryp.cpp menu.cpp`

Submit the program file `hw05.tar` to canvas by the due date on top of this page.