

**CS 291**  
**Programming Project 1**  
**Half-Byte Packing**

Write a program that simulates Half-Byte Packing decoding. The program is to read in a half-byte packed encoded string and then decode it. You must use an alphabet of at least 10 characters for your code. For instance, you can use the digits 0, 1, 2, ..., 9 or any 10 letters of the alphabet of your choice. You can use ASCII or EBCDIC or create your own code. However, in your program description, you **must** list your code with the character equivalents.

**Requirements** You must hand-in:

1. A listing of your program
2. A description of your program. This can include how the input is entered into the program (keyboard, files) and where the output goes (screen, files). Also required is a list of your code and how your program decodes (what methods did you use to write the program, arrays, pointers, direct addressing, or indirect addressing).
3. Test runs (screen shots of the test runs, cut and paste these into your word processor) and why you chose the data for these test runs.