Structured Data

Consider the following code:

typedef int mark;

typedef struct {
    int a;
    int *b;
} foobar;

mark x = 2.6;
foobar y;
y.a = x;
y.b = &y.a;
x++;
int z = *y.b;

What is the value of x, y.a, y.b, z ?

Structs, strings and arrays

How would you store a student record, consisting of student id number, first and last name and entry semester in a data structure?
Programming

Take a look at the functions provided by the string library `<string.h>`

Write a function with prototype

```c
MakePlural(char *singular, char *plural);
```

This function is intended to take a singular noun `singular` and construct its plural form `plural`.

For those whose first language is not English, the following rules cover most (but not all) native or nativized English words:

- Words form the plural by adding `-s` (e.g. `cat/cats, tie/ties`), except that
- Words ending in `-s, -z, -x, -sh, -ch` add `-es` (e.g. `boss/bosses, wish/wishes`), and
- Words ending in `-Xy`, where `X` is a consonant (i.e. `not a, e, i, o, u`) change the `-y` to `-ies` (e.g. `cherry/cherries but boy/boys`).