

# CS23021 Computer Science I

## Project #4

Due by e-mail by 11:59pm on Wednesday, October 25, 2006

You will write two programs in this project. The first program “accountant” eliminates double entries in the sequence of integers. The second program “checker” corrects syntax errors in English text.

**Accountant.** Write a program that accepts a sequence of integers (some of which may repeat) as input and prints every integer exactly once. You can assume that there are no more than 20 integers in the input. But there may be less. Zero signifies the end of input. It should be NOT printed.

For example, when the following input is provided to your program:

```
5 6 22 5 22 7 6 0
```

your program should print:

```
5 6 22 7
```

You should use an array to store the numbers input. Place your program in single file: `accountant.cpp`

**Checker.** Write a program that reads English text. The program should output the text with spacing corrected and with letters corrected for capitalization. In particular, in the output text all strings of two or more blank spaces should be compressed to a single blank. A sentence (a letter starting the text and following a dot) should start with an uppercase letter. There should be a space after a comma or a dot. No other formatting is required.

For example, the input:

```
the    Answer to life,the Universe, and    everything    is 42.
```

Should produce the following output:

```
The answer to life, the universe, and everything is 42.
```

Empty line signifies the end of input. This empty line should NOT be output.

You should use a C++ string to store a line of input. Place your program in single file: `checker.cpp`