

# Computer Programming

## *C Programming Assignment #1, 2005*

### Brief:

You are to write an election vote counting program.

### Background:

In Crontabland there are two parties contesting an election for president. Their election mechanism is very different to how most other countries operate. When voters cast their vote they first must choose which party they prefer. Once they have selected the party, they then have a choice of two candidates put forward by the party and they go on to vote for one of those.

The party that receives the most votes will have their candidate elected. The candidate deemed to be elected will be the one who received most votes from that party block.

The parties are the and their candidates are show here:

<i>Party Name</i>	<i>Candidate 1</i>	<i>Candidate 2</i>
One Way Party	Kalenko, Victor	Radlick, Zuma
Unity Party	Petroski, Decimus	Torvalds, Linus

The program should carry out the polling process *indefinitely* until the user requests that the program is stopped.

Each time the loop iterates it should prompt the user to select a party and based on the party voted for, present the candidates names so that they may choose a candidate from that party.

Each time a party is voted for one extra is added to its total vote. Each time a candidate is voted for one extra is added to his total vote count. As long as the user replies in the positive the loop should execute again.

At the end of the program the total votes cast (and spoiled votes) should be displayed, along with the name of the winning party and winning candidate from that party. You may choose to display any other information that you think appropriate.

The other side of this page shows a sample of how the program might look. You are not required to produce identical output but attractiveness on screen gains more marks, as does the use of comments withing the program to explain what individual pieces of code do.

### Due Date:

20050211, 15:15

### Submission Mechanism:

Paper & online at the program submission link at <http://mail.cti-clonmel.ie>

## Sample Run:

```
Please Choose a Party (O/U): O
Candidates are:   Kalenko, Viktor
                  Radlick, Zuma
Please choose a candidate (K/R): K

Thank you. Are there more votes?y

Please Choose a Party (O/U): u
Candidates are:   Petroski, Decimus
                  Torvalds, Linus
Please choose a candidate (P/T): t

Thank you. Are there more votes?y

Please Choose a Party (O/U): O
Candidates are:   Kalenko, Viktor
                  Radlick, Zuma
Please choose a candidate (K/R): K

Thank you. Are there more votes?N
=====
Results:
Winning Party:      One Way Party (2 votes)
Winning Candidate:  Kalenko, Viktor (2 votes)

Total votes cast:    3
Spoiled votes:       0
```