



MODULAR PROGRAMME

ASSESSMENT SPECIFICATION

Module Details

Module Code UFEEHE-30-1	Run 07SEP/1 AY	Module Title Programming in C
Module Leader Ian Johnson	Module Tutors Ian Johnson, John Counsell	
Component and Element Number B1		Weighting: (% of the Module's assessment) 15%
Element Description Practical Coursework 1		<u>Total Assignment time</u> 9 hours

Dates

Date Issued to Students To be supplied	Date to be Returned to Students 28th January 2008
Submission Place THE POST BOXES IN N BLOCK FOYERS Boxes are open two weeks before submission date	Submission Date 20th December 2007
	Submission Time 2.00 pm

Deliverables

As per attached specification.

Module Leader Signature

Ian Johnson

UFEHE-30-1 – C Programming

First Coursework - November 2007

Duckshoot

Your assignment, due at 10am on the first year hand in day (Thursday), 20th December is to implement the duckshoot program as specified in the Introduction to Digital IO worksheet available on the module web page (<http://www.cems.uwe.ac.uk/~irjohnso/coursenotes/ufs001/ufs001c1-w06-NEW.pdf>).

As per the description on the worksheet, you should start the program with alternate LEDs lit (10101010) on the MARCO RACK, and rotate this bit pattern, inverting LEDs with a trigger up, then down, then up sequence on the bottom switch. Not "machine gunning" implies that the starting with the switch up, down to fire, return to up again sequence has to be repeated in full to fire again. Penalty for leaving the switch down means that unless the switch is returned to up in a given time, the duck reappears to penalize the player..

The marks shown are the maximum available in each category.

Deliverables:

A diagrammatic design of your program using any method with which you are familiar (10)

Source code

Well commented (10)
(-5% for C++ comments)

Program Banner (5)

Program uses functions (5)

Function banners (5)

Functions use arguments (15)

No Global variables (10)

Program is laid out in either classic C or Pascal style (10)

Together with this page, signed off by your lab tutor, to indicate you have demonstrated your work:

Test	Marks	Signature & Date
Continuously rotating bit pattern on a suitable timebase, <u>not using a software delay loop</u>	(5)	
Player penalty for leaving switch down (duck reappears)	(5)	
Not machine-gunning	(10)	
Direction variable by switch within game	(5)	
Using 2 switches to implement 4 speeds or levels of difficulty within game	(5)	