# LABORATORY 1 – REPORT

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*I hereby declare that the attached submission is all my own work, that it has not previously been submitted for assessment, and that I have not knowingly allowed it to be used by another student. I understand that deceiving or attempting to deceive examiners by passing off the work of another as one's own is not permitted. I also understand that using another's student’s work or knowingly allowing another student to use my work is against the University regulations and that doing so will result in loss of marks and possible disciplinary proceedings.*

Note: Coursework examiners are entitled to reject any coursework which does not have a signed copy of this form attached or are submitted late.

## Problem 1

The aim of this problem is to write a C program that displays “Hello World!”

### Plan

* Print: Hello World!
* Exit the program

### Development

The first step in the development of my program was to include the standard C libraries (stdio.h, stdlib.h,) that in order to be able to use certain functions in the program.

Then, I started to write the main function of the program.

I used the ‘printf’ command to display the “Hello World!” text on my screen

### Testing

I compiled and tested the program using the gcc compiler. I was not presented any errors when I compiled my code.

The result was that the “Hello World!” text was displayed on my screen when I ran the program

### Conclusion

During this lab session I learned about some of the functions contained in the stdio.h and stdlib.h libraries (e.g. printf)..

The final version of the C source code for problem 1 is attached as *hello.c* file

## Problem 2

The aim of this problem is to write a C program that displays a welcoming message, takes in user input and thus chooses a suitable response to the user input and finally thanks the user for inputting data.

### Plan

* Print a welcoming message
* Ask the user for input
* Use a string value to store the input
* Use an if statement to check whether the user input meets certain equirement
  + Print text that agrees with user input
* Use an else statement to display text that disagrees with the user
* Print text that thanks the user for answering the question
* Exit the program using a return function

### Development

The first step in the development of my program was to include the standard C libraries (stdio.h, stdlib.h, string.h) that in order to be able to use certain functions in the program.

Then, I started writing up the main function of the program. I declared a variable ‘SPORT’ to store the user input. I used two ‘printf’ command to display “Welcome to Sport's Survey...” and “Please enter your favourite sport:”. I then used a ‘scanf’ command to take the user input. I then set the user input to the variable ‘SPORT’. I then used an ‘if’ statement to check if the user input was “Soccer”. If it was soccer I then used a ‘printf’ statement to display “Good Choice! I like [user input] , too!”. I then used an ‘else’ statement to use the command ‘printf’ to display “What? [user input]? Not good enough! I like Soccer.”. I then used a ‘printf’ command to thank the user for inputting data, “Thanks for taking part in my survey...”.

### Testing

I compiled and tested the program using the gcc compiler. I was not presented any errors when I compiled my code.

### Conclusion

During this lab session I learned about some of the functions contained in the stdio.h, stdlib.h and string.h libraries (e.g. scanf)..

The final version of the C source code for problem 1 is attached as *sport.c* file