# Software Systems Development: AS Practice Questions

## Section 1

1. Write a console program that prints the text “Hello World!” To the screen.
2. Write a console program which will ask the user to input their first name and surname. The console will output a message congratulating the user for doing this correctly and use the input in the output. The output should be “your name is (the name of the user)”.
3. Write a console program which will ask the user for their name and their favourite colour. Then output, “Your favourite colour is \_\_\_ which is nice for someone who is \_\_\_\_ years old.
4. Write a console program which completes the following:

* The user inputs three numbers
* The first two numbers are added together and the third number is subtracted from the result of adding the first two numbers.
* The user must be prompted on screen to enter each number and the user must be informed of the outcome of the calculations (The sum of \_\_ and \_\_ minus \_\_ equals \_\_)

## Section 2

1. Write a program which asks for number of hours worked and rate of pay to calculate tax and national insurance to work out the take home pay per week. Format the details as currency using place holders.

* Fiirst work out gross pay (hour per week X rate of pay)
* Work out Tax. Take tax to be 20%
* Work out National Insurance. Take NI to be 10.4%
* To work out the overall net pay, take tax and NI away from the gross pay.

1. Write a program which accepts user’s details as name, city, age, and pin number. Store all the values in appropriate variables and then print the information.
2. Write a console based application which will solve the area of a right-angled triangle after the user has entered the base and height. The unit of measurement will be cm and the program should prompt the user for data entry and output a relevant message.
3. Write a console program to calculate the area of a rectangle.
4. Write a console program to check whether input character is a vowel or not.

## Section 3

1. Write a console program which will ask the user to enter their AS SSD mark. The program will then output their Grade.

* A >=80
* B >=70
* C>=60
* D>=50
* E>=40
* U<40

1. Write a program which accepts a number from the user and identify whether the number is even or odd.
2. Write a program which accepts a number from the user between 1 and 7 and displays the corresponding day of the week, starting with Monday.