**SENG 102 LABWORK 2**

1. **Write a C program that does the following:**
2. **Initialize variables x = 5 and y = 10.**
3. **Initialize pointers xptr and yptr.**
4. **Assign the addresses of x and y to xptr and yptr, respectively.**
5. **Print the values of x and y.**
6. **Print the addresses of x and y.**
7. **Print the values of xptr and yptr.**
8. **Print the addresses of xptr and yptr.**
9. **Write a C program that does the following:**
10. **Initialize variables a = 1, b = 3.**
11. **Initialize pointers aptr and bptr.**
12. **Assign the addresses of a and b to aptr and bptr, respectively.**
13. **Print the values of a and b.**
14. **Add a and b using aptr and bptr. Print the result.**
15. **Find the maximum of a and b using aptr and bptr. Print the result.**
16. **Swap a and b using aptr and bptr.**
17. **Print the values of a and b.**
18. **Write a C program that asks the user to enter a 3-digit integer. Define a *digit()* function that accepts this integer, which separates its digits. The function then sends the digits to the main function. Finally, print the results in the main function. Use call by reference.**

**Sample run:**

**Enter a 3-digit integer: 345**

**Hundreds digit: 3**

**Tens digit: 4**

**Ones digit: 5**

1. **Write a C program that asks the user to enter the duration of a flight in seconds. The function *flight()* accepts the duration and converts it to hours, minutes and seconds. Use call by reference.**

**Sample run:**

**Enter the flight duration in seconds: 9867**

**The flight is 2 hours 44 minutes and 27 seconds long.**