

CS112: Computing Laboratory

Assignment 4

Date: 26/04/2022

Duration: 2 p.m. – 5 p.m.

Total 20 marks

Instruction:

- Proper indentation is mandatory [3 marks]
 - You should comment the statements wherever necessary in order to make the code understandable [2 marks]
1. You are provided with 1, 2, 5, 10, 20, 50 and 100 rupees note. Ask the user the total amount he/she wants. WAP that will display the number of each rupee note (using fewer number of less rupee notes). [5 marks]

File Name: 4_1.c

2. A polynomial in x of at most degree 2 is given by

$$ax^2 + bx + c$$

Its discriminant is defined as: $b^2 - 4*a*c$.

If the discriminant is positive, then two real roots exist. If the discriminant is zero, then the two roots are real and equal. In this case we say that the polynomial has multiple real roots. If the discriminant is negative, then the roots are complex. For each set of values for a,b,c , your program should print the computed roots along with one message. Solve the above program using switch cases. [5 marks]

File Name: 4_2.c

3. WAP which reads an integer and displays it in the reverse order. Also print the sum of all digits in the integer. For example if the given integer is 1234 then the output should be 4321 and 10. [5 marks]

File Name: 4_3.c