Grading Guidelines for Part-2 of Lab Test 2

Problem Set 1

Grade this part strictly, do not be too lenient. For 1 mark subparts, if they are not close, give 0.

If they do not submit the Intermediate file and were not excused by us: deduct -1 for problem set 1, 0.5 for problem set 2)

- Output: 2 marks
  - Exact format not important.
  - Test case 1: N = “123$$248$$$$$”, p = ‘$’
    - Number of substrings = 2, max length = 5 (0.5 marks, binary, they must get both correct)
    - Modified string = “123:248:” (0.5 marks, binary)
  - Test case 2: N = “1231123111231”, p = ‘1’
    - Number of substrings = 4, max length = 3 (0.5 marks, binary, they must get both correct)
    - Modified string = “:23:23:23:” (0.5 marks, binary)
- Code: 8 marks
  - For both the functions, we said “a character p” in description but the parameters were “char *p”, the pointer was useless. So it is ok if they change this parameter to just char p.
  - CountSubstr() function: 4 marks
    - Proper pointer parameters to return count and max length - 1 mark
    - Base case of recursion - 1 mark (can take any constant length string)
      - Check that it works for both when last char is p and when not
    - Recursive call and proper setting of variables on return - 2 marks
    - If they do not do recursion, give 1 out of 4 in this part max., 0 if there is any mistake at all in the non-recursive code
    - Deduct 1 if they use any additional array or a string function
    - Deduct 1 if they change the return value from void
  - RemoveSubstr() function: 4 marks
    - Creating the new string to store the modified string – 1 mark
      - Give 0 if they do not malloc, but just use a static array declaration, even if they do int A[n] sort of thing
    - Finding the substrings – 2 marks
    - Proper replacement with : - 1 mark
    - The solution may vary depending on whether they do recursive or not. Use your judgement
    - Deduct 1 if they use any string function
    - Deduct 1 if they use any other parameters other than those specified, or change the return value type

    - No marks for main()

Problem Set 2

Grade Leniently. Use your judgement.

- Output: 1 mark
    - Test case: S1 = “ab1cd2ef9g”, S2 = “g9fe2dc1ba”
        - Should say S1 is reverse of S2 (0.5 marks)
        - Number of digit character in S1 with desired property = 2 (0.5 marks)
- Code: 5 marks
    - IsReversed function: 1.5 marks
        - Base case – 0.5 mark
        - Recursive call – 1 mark
    - CheckStr() function: 3 marks
        - Nested loops to go over characters – 1 mark
        - Checking for digit character and < - 1 mark
            - They can convert to numeric value and compare, or just directly compare the asci codes, both ok
        - Counting – 1 mark
    - main(): 0.5 mark
        - Give 0.5 if they have done any part (read, print, call,..) that looks ok here.
    - Ok if they use any string functions
    - For each, give most of the marks as long as they are more or less correct. Marks for each part are small, so if they are very close, just some minor mistake, you may think of taking 0.5 over two functions instead of 0.5 in each etc. Use your judgement.