

### Week 3 (Assignment III)

1. Write a C program to remove a specific character from a string.
2. Write a C program to count the frequency of each character of the string.
3. Write a C program to add two numbers using pointers.
4. Write a C program to find the factorial of a number using pointers.
5. Find the output of the following snippets:
  - a. `char ****k;`
    - i) k is a pointer to a pointer to a pointer to a char
    - ii) k is a pointer to a pointer to a pointer to a pointer to a char
    - iii) k is a pointer to a char pointer
    - iv) k is a pointer to a pointer to a char
  - b. 

```
void main()
{
    int k = 5;
    int *p = &k;
    int **m = &p;
    **m = 6;
    printf("%d\n", k);
}
```

    - i) 7
    - ii) 4
    - iii) 6
    - iv) Error
6. Choose the correct statement about structures in C program:
  - a. Structure elements can be initialized at the time of declaration.
  - b. Structure members cannot be initialized at the time of declaration
  - c. Only integer members of structure can be initialized at the time of declaration
  - d. None of the above
7. What is the size of a C structure? How the size of a C structure is calculated?