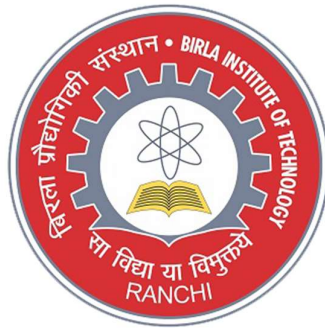


Birla Institute of Technology, Mesra,
Patna Campus



CD-Assignment

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Sec-CSE 6th

Assignment-2

4. Write a program to count no of repeated word of a text file without file handling.

Code:-

```
/*
 * C Program to Count the Number of all Repeated Words
 * in a String & Display the Word with its Frequency
 */
#include <stdio.h>
#include <string.h>
#include <ctype.h>

struct detail
{
    char word[20];
    int freq;
};

int update(struct detail [], const char [], int);

int main()
{
    struct detail s[10];
    char string[100], unit[20], c;
    int i = 0, freq = 0, j = 0, count = 0, num = 0;
```

```

for (i = 0; i < 10; i++)
{
    s[i].freq = 0;
}
printf("Enter string: ");
i = 0;
do
{
    fflush(stdin);
    c = getchar();
    string[i++] = c;

} while (c != '\n');
string[i - 1] = '\0';
printf("The string entered is: %s\n", string);
for (i = 0; i < strlen(string); i++)
{
    while (i < strlen(string) && string[i] != ' ' && isalnum(string[i]))
    {
        unit[j++] = string[i++];
    }
    if (j != 0)
    {
        unit[j] = '\0';
        count = update(s, unit, count);
        j = 0;
    }
}

```

```
    }  
}
```

```
for (i = 0; i < count; i++)  
{  
  
    if (s[i].freq > 1)  
    {  
        num++;  
    }  
}  
printf("The number of repeated words are %d.\n", num);  
  
return 0;  
}
```

```
int update(struct detail s[], const char unit[], int count)  
{  
    int i;  
  
    for (i = 0; i < count; i++)  
    {  
        if (strcmp(s[i].word, unit) == 0)  
        {  
            s[i].freq++;  
        }  
    }  
}
```

```
        return count;
    }
}

/*If control reaches here, it means no match found in struct*/
strcpy(s[count].word, unit);
s[count].freq++;

/*count represents the number of fields updated in array s*/
return (count + 1);
}
```

Output:-

```
Enter string: shubham is a boy he likes to play football.shubham is a bad boy too.
The string entered is: shubham is a boy he likes to play football.shubham is a bad boy too.
The number of repeated words are 5.

...Program finished with exit code 0
Press ENTER to exit console.
```

5. Write a program to count number of comment lines of a text file using file handling.

Code:-

```
/* C Program to Count Lines, Blank Lines, Comments in File */

#include <stdio.h>

int main()
{
    int n_o_c_l = 0, characters = 0;
    FILE *fp1;
    char ch;
    char * arrr =
"C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";
    fp1 = fopen(arrr, "r");
    printf("The content of the file %s are : \n", arrr);

    while ((ch = fgetc(fp1)) != EOF)
    {
        characters++;
        printf("%c", ch);
        if (ch == '/')
        {
            if ((ch = fgetc(fp1)) == '/')

```

```
    {  
        n_o_c_l++;  
    }  
}  
  
    }  
  
    }  
  
    printf("\nTotal no of comment line: %d\n", n_o_c_l);  
    return 0;  
}
```

Output:-

```
The content of the file C:\Users\vampirepapi\Desktop\nowhere\Codes\Cpp\test.txt are :  
Shubham Sourabh  
/lg jaa gale or mrjaa  
/chala jaa yha se  
/drr nhi lgta tereko  
Himanshu Kislay  
Anish Raj  
Total no of comment line: 3  
[Finished in 1.1s]
```

6. Write a program to count number of words which have a vowel on even position of a text file using file handling.

Code:-

```
#include <stdio.h>

int main() {
    FILE *fp;
    char* file =
"C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";
    unsigned short vowels = 0;
    char c;

    fp = fopen(file, "r"); // 'r' opens the file in read mode

    printf("READING THE CONTENTS OF THE FILE [ %s ]\n", file);

    while((c = fgetc(fp)) != EOF) {
        if(c == 'a' || c == 'A' || c == 'e' || c == 'E' || c == 'i' || c == 'I' || c == 'o' || c ==
'O' || c == 'u' || c == 'U') {
            vowels++;
        }

        printf("%c", c);
    }
}
```



```
printf("\n");

printf("NUMBER OF VOWELS: %hu \n", vowels);

fclose(fp);

return 0;

}
```

Output:-

```
READING THE CONTENTS OF THE FILE [ C:\Users\vampirepapi\Desktop\nowhere\Codes\Cpp\test.txt ]
Shubham Sourabh
Himanshu Kislay
Anish Raj
NUMBER OF VOWELS: 13
[Finished in 0.3s]
```

