



আন্তর্জাতিক ইসলামী বিশ্ববিদ্যালয় চট্টগ্রাম
الجامعة الإسلامية العالمية شيتاغونغ
International Islamic University Chittagong

Assignment

Course Title-Computer Programming 1 lab

Course Code: CSE- 1121

Assignment No. – 05

(Official & for FINAL TERM)

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Submitted by-

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Matric ID: C201032, Section: A

Department of CSE (Computer Science and Engineering)

CodeForce- Sheet 4- I

By sorowarmahabub1709vip, contest: Sheet #4 (Strings), problem: (I) Palindrome, **Accepted**,

```
#include<stdio.h>
int main()
{
    char s[1000001];
    scanf("%s", &s);
    int count= 0, p, q;
    for(int m=0; s[m]!='\0'; m++)
        count++;
    // printf("%d\n", count);    // will remove
    int yes= 0, no= 0;
    for(p=0; p<=(count/2); p++, count--)
    {
        if(s[p]==s[count-1])
            yes++;
        else
            no++;
    }
    // printf("%d\n%d\n", yes, no); //will remove

    if(no>0)
        printf("NO\n");
    else
        printf("YES\n");
    return 0;
}

// Author: Sorowar Mahabub,
// studies B.Sc in CSE, IIUC
```

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CodeForce- Sheet 4- J

94786240	Practice: sorowarmahabub1709vip	219856J - 12	GNU C++14	Accepted
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→ Source

```

#include<stdio.h>
#include <string.h>

int main()
{
    int ip, len, a, b, c, d, e, f, g, h, i, j, k, l, m, n;
    int o, p, q, r, ss, t, u, v, w, x, y, z, mm;
    char s[10000009];
    a=b=c=d=e=f=g=h=i=j=k=l=m=n=o=p=q=r= 0;
    ss=t=u=v=w=x=y=z= 0;
    gets(s);
    len = strlen(s);
    for(ip=0; ip<=(len-1); ip++)
    {
        if(s[ip]=='a') a++;
        else if(s[ip]=='b') b++;
        else if(s[ip]=='c') c++;
        else if(s[ip]=='d') d++;
        else if(s[ip]=='e') e++;
        else if(s[ip]=='f') f++;
        else if(s[ip]=='g') g++;
        else if(s[ip]=='h') h++;
        else if(s[ip]=='i') i++;
        else if(s[ip]=='j') j++;
        else if(s[ip]=='k') k++;
        else if(s[ip]=='l') l++;
        else if(s[ip]=='m') m++;
        else if(s[ip]=='n') n++;
        else if(s[ip]=='o') o++;
        else if(s[ip]=='p') p++;
        else if(s[ip]=='q') q++;
        else if(s[ip]=='r') r++;
        else if(s[ip]=='s') ss++;
        else if(s[ip]=='t') t++;
        else if(s[ip]=='u') u++;
        else if(s[ip]=='v') v++;
        else if(s[ip]=='w') w++;
        else if(s[ip]=='x') x++;
        else if(s[ip]=='y') y++;
        else if(s[ip]=='z') z++;
    }

    /*
    for(mm='a'; mm<='z'; mm++)
    printf("%c : %d\n", m, );
    */

    if(a!=0) printf("a : %d\n", a);
    if(b!=0) printf("b : %d\n", b);
    if(c!=0) printf("c : %d\n", c);
    if(d!=0) printf("d : %d\n", d);
    if(e!=0) printf("e : %d\n", e);
    if(f!=0) printf("f : %d\n", f);
    if(g!=0) printf("g : %d\n", g);
    if(h!=0) printf("h : %d\n", h);
    if(i!=0) printf("i : %d\n", i);
    if(j!=0) printf("j : %d\n", j);
    if(k!=0) printf("k : %d\n", k);
    if(l!=0) printf("l : %d\n", l);
    if(m!=0) printf("m : %d\n", m);
    if(n!=0) printf("n : %d\n", n);
    if(o!=0) printf("o : %d\n", o);
    if(p!=0) printf("p : %d\n", p);
    if(q!=0) printf("q : %d\n", q);
    if(r!=0) printf("r : %d\n", r);
    if(ss!=0) printf("s : %d\n", ss);
    if(t!=0) printf("t : %d\n", t);
    if(u!=0) printf("u : %d\n", u);
    if(v!=0) printf("v : %d\n", v);
    if(w!=0) printf("w : %d\n", w);
    if(x!=0) printf("x : %d\n", x);
    if(y!=0) printf("y : %d\n", y);
    if(z!=0) printf("z : %d\n", z);

    return 0;
}

```

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CodeForce- Sheet 4- K

By sorowarmahabub1709vip, contest: Sheet #4 (Strings), problem: (K) I Love strings, **Accepted**

```
#include<stdio.h>
#include<string.h>
int main()
{
    int N, n;
    scanf("%d\n",&N);
    for(n=0; n<N; n++)
    {
        char S[101],T[101];
        int i, j, s, t;
        // gets(S);
        // gets(T);
        scanf("%s %s\n",S,T);
        for(s=0; S[s]!='\0';)
            s++;

        for(t=0; T[t]!='\0';)
            t++;

        for(i=0; S[i]!='\0' && T[i]!='\0'; i++)
            printf("%c%c", S[i], T[i]);

        if(s<t)
            while(T[s]!='\0')
            {
                printf("%c", T[s]);
                s++;
            }

        else
            while(S[t]!='\0')
            {
                printf("%c", S[t]);
                t++;
            }
        printf("\n");
    }
    return 0;
}
```

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_strlen Function

```
#include <stdio.h>

int _strlen(char p[])
{
    int c;
    c = 0;
    while (p[c] != '\0')
        c++;
    return c;
}

int main()
{
    char p[100001]= "Sorowar Mahabub";
    //p= 15 Characters
    //gets(p);
    _strlen(p);
    printf("Length of the string: %d\n", _strlen(p));
    return 0;
}

//      Author: Sorowar Mahabub,
//      studies B.Sc in CSE, IIUC
```

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strrev Function

```
#include<stdio.h>
#include<string.h>

void _strrev(char p[])
{

    int i = 0, temp;
    int j = strlen(p) - 1;

    while (i < j) {
        temp = p[i];
        p[i] = p[j];
        p[j] = temp;
        i++;
        j--;
    }
}

int main() {
```



```
char p[100001]= "bubahaM raworoS";  
int i, j = 0;  
//gets(p);  
printf("Before reverse: ");  
puts(p);  
_strrev(p);  
printf("After reverse: %s\n", p);  
return (0);  
}  
//      Author: Sorowar Mahabub,  
//      studies B.Sc in CSE, IIUC
```

strcat Function

```
#include <stdio.h>  
  
void _strcat(char p[], char q[])  
{  
    int c, d;  
    c = 0;  
    while (p[c] != '\0')  
    {  
        c++;  
    }
```

```
}  
  
d = 0;  
  
while (q[d] != '\0')  
{  
    p[c] = q[d];  
    d++;  
    c++;  
}  
p[c] = '\0';  
}  
  
int main()  
{  
    char p[100001]= "Sorowar ";  
    char q[100001]= "Mahabub";  
  
    //gets(p);  
    //gets(q);  
  
    _strcat(p, q);  
  
    // printf("%s\n", p);
```



```
puts(p);

return 0;
}

//      Author: Sorowar Mahabub,
//      studies B.Sc in CSE, IIUC
```

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