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Compiler construction

Major Assignment

EX: Write a program to reorganize a D.F.A. as b^*abb .

```
#include<stdio.h>
#include<conio.h>
int a,b;
#include<math.h>
#include<string.h>
void call(int,int,int);
char s[100];
int i,j,k,l;
void call1(int,int,int);
void call2(int,int,int);
void main()
{
clrscr();
printf("\n ENTER THE STRING::::");
gets(s);
l=strlen(s);
if(l>=3)
{
```

```

i=0;
while(s[j]!=NULL && j<=l)
{
if(s[i]== 'b')
{
printf("\n THIS IS FIRST STATE");

i++;
}
else if(s[i]=='a')
{
call(i,j,l);
break;
}
j++;
}}
Else
printf("\n NOT ACCEPTED");
printf("\n\n\t ****IF LAST STAGE IS FOURTH THEN STRING IS ACCEPTED****");
getch();
}
void call(int i,int j,int l)
{
while(s[j]!=NULL && j<=l)
{
if(s[i]=='a')
{
printf("\n THIS IS SECOND STATE");

i++;

```

```

j++;
call(i,j,l);
break;
}
else if(s[i]=='b' && s[i]!=NULL)
{
printf("\n THIS IS THIRD STATE");
j++;
i++;
call1(i,j,l);
break; }
}}
void call1(int i,int j,int l)
{
while(s[j]!=NULL && j<=l)
{
if(s[i]=='b')
{ //goto call();
printf("\n THIS IS FOURTH STATE");
// i++;
// j++;
if(s[j]=='\0')
{
printf(" FINAL STATE ALSO");
break;
}
i++;
j++;

```

```
call2(i,j,l);
break;
// i++;
// j++;
}
else if(s[i]=='a')
{
call(i,j,l);
break;
}
}}
void call2(int i,int j,int l)
{
while(s[j]!=NULL && j<=l)
{
if(s[i]=='b')
{
printf("\n THIS IS FIRST STATE");
i++;
j++;
call2(i,j,l);
break;
}
else if(s[i]=='a')
{
call(i,j,l);
break;
}
}}}
```