

SIMULATING PUSHDOWN AUTOMATA (0^n1^n):

```
#include
#include char stack[20];
int top;
int push() { top=top+1;
  stack[top]='0';
stack[top+1]='\0';
}
int pop() { if(top<1) return(0);
else { stack[top]='\0';
top=top-1;
return(1);
}
}
int main()
{ int m,i,j,k,l,a,len;
char input[20],rem_input[20];
printf("Simulation of Pushdown Automata for  $0^n1^n$ ");
printf("Enter a string : ");
scanf("%s",input);
l=strlen(input);
j=0;stack[0]='Z';
top=0;
printf("Stack\tInput\n");
printf("%s\t%s\n",stack,input);
while(1)
{
len=strlen(input);
while(len>0)
{
if(input[0]=='0')
{
push(); m=0;
for(k=1;k=1)
{
printf("String not accepted");
}
else { printf("String accepted");
}
}
b: printf(".....");
```