**DETERMINISTIC FINITE AUTOMATA**

#include<stdio.h>

#include<string.h>

#define max 20

int main()

{

int trans\_table[4][2]={(1,3),(1,2),(1,2),(3,3)};

int final\_state=2,i;

int present\_state=0;

int next\_state=0;

int invalid=0;

char input\_string[max];

printf("Enter a string:");

scanf("%s",input\_string);

int l=strlen(input\_string);

for(i=0;i<l;i++)

{

if(input\_string[i]=='a')

next\_state=trans\_table[present\_state][0];

else if(input\_string[i]=='b')

next\_state=trans\_table[present\_state][1];

else

invalid=l;

present\_state=next\_state;

}

if (invalid==1)

{

printf("invalid");

}

else if(present\_state==final\_state)

printf("acceept\n");

else

printf("dont accept");

}

OUTPUT:

