

//Run in c compiler. This is the code of ball brick game which i have tried.

```
#include <stdio.h>

#include <conio.h>

#include <time.h>

void delay(int n)

{

    int ms=10000*n;

    clock_t st=clock(); //time delay

    while(clock())<st+ms);

}

int main()

{

    int row,col,count;

    printf("enter size of matrix \n"); //here we are taking input from user about the size of matrix

    scanf ("%d %d",&row,&col);

    printf("size of matrix is %d x %d\n",row,col);


    int i,j,l1=1,temp1=0,temp2=0,temp3=0,temp4=0,cc=0;

    char a[row][col],choice='q',move,type;

    int m=row/2,n=col/2,posx,posy;//posx means position in x direction and posy means position in y

    direction at which type will be entered

    int x=n;

    for(i=1;i<=row;i++){

        for(j=1;j<=col;j++)

        {

            printf("enter brick position and brick type\n");

            scanf("%d%d%c",&posx,&posy,&type);// here input is taking from user and type of bricks also

            a[posx][posy]=type;

        }

    }
```

```
}  
printf("Enter ball count\n"); // means chances or life for playing the game  
scanf("%d",&count);  
again:
```

```
//initialisation of background
```

```
for(i=1;i<=row;i++)
```

```
{
```

```
for(j=1;j<=col;j++)
```

```
{
```

```
if(i==1)
```

```
{
```

```
a[i][col]='W';
```

```
}
```

```
if(i==row)
```

```
{
```

```
a[i][col]='G';
```

```
}
```

```
if(j==1 || j==col)
```

```
{
```

```
a[i][j]='W';
```

```
}
```

```
a[m][n]='=';
```

```
//updated version
```

```
update:
```

```
clrscr();
```

```
//for player's pad or slider
```

```
a[row][x]='o';
```

```
//for assignment of movement of ball
```

```
//1) for left-up movement (if choice is q)
```

```
if(choice=='q'&& m!=1&& n!=1)
```

```
{
```

```
    m--;n--;
```

```
    a[m][n]='='; //this will show movement of ball or path of ball striking the brick or walls
```

```
}
```

```
//2) for right-up movement (if choice is w)
```

```
else if(choice=='w'&& m!=1&& n!=col-1)
```

```
{
```

```
    m--;n++;
```

```
    a[m][n]='=';
```

```
}
```

```
//3) for left-down movement (if choice is e)
```

```
else if(choice=='e'&& m!=row-1&& n!=1)
```

```
{
```

```
    m++;n--;
```

```
    a[m][n]='=';
```

```
}
```

```
//4) for right-down movement (if choice is r)
```

```
else if((choice=='r'&&m!=row-1&&n!=col-1)
```

```
{
```

```
m++;n++;
```

```
a[m][n]='';
```

```
}
```

```
temp3=m;
```

```
temp4=n;
```

```
//For executing figure
```

```
for(i=1;i<=row;i++)
```

```
{
```

```
for(j=1;j<=col;j++)
```

```
{
```

```
printf("%c",a[i][j]);
```

```
}
```

```
printf("\n");
```

```
}
```

```
//for hitting pad
```

```
move=getch();
```

```
//1) for left movement of slider
```

```
if((move=='a' || move=='s') && x!=1)
```

```
{
```

```
x--;
```

```
}
```

```
//2) for right movement of slider
```

```
if((move=='k' || move=='l') && x!=col)
```

```
{
```

```
x++;
```

```
}
```

```
//for movement of ball
```

```
//critical condition - [NW to WS]
```

```
if((m==1 && temp3==temp1-1 && temp4==temp2-1))
```

```
{
```

```
choice='e';
```

```
}  
  
//critical condition - [NE to SE]  
  
else if((m==1&&temp3==temp1-1&&temp4==temp2+1))  
  
{  
  
choice='r';  
  
}  
  
//critical condition - [SE to NE]  
  
else if((m==14&&temp3==temp1+1&&temp4==temp2+1))  
  
{  
  
choice='w';  
  
}  
  
//critical condition - [WS to NW]  
  
else if((m==14&&temp3==temp1+1&&temp4==temp2-1))  
  
{  
  
choice='q';  
  
}  
  
//critical condition - [NW to NE]  
  
else if((n==1&&temp3==temp1-1&&temp4==temp2-1))  
  
{  
  
choice='w';  
  
}  
  
//critical condition - [WS to SE]
```

```

else if((n==1&&temp3==temp1+1&&temp4==temp2-1))

{

choice='r';

}

//critical condition - [SE to WS]

else if((n==47&&temp3==temp1+1&&temp4==temp2+1))

{

choice='e';

}

//critical condition - [NW to NE]

else if((n==47&&temp3==temp1-1&&temp4==temp2+1))

{

choice='q';

}

//critical condition - [right bottom corner]

else if(m==row-1&&n==col-1)

{

choice='q';

}

//critical condition - [left bottom corner]

else if(m==row-1&&n==1)

```

```

{

choice='w';

}

//critical condition - [up right corner]

else if(m==1&& n==col-1)

{

choice='e';

}

//critical condition - [left top corner]

else if(m==1&& n==1)

{

choice='r';

}


//previous move of ball

temp1=temp3;

temp2=temp4;

x=x+col-1;

//game ending

if(temp3==row-1&&(temp4==x-(col-1)||temp4==x-(col-2)||temp4==x-(col-3)||temp4==x-(col-4)||temp4==x-(col-5)||temp4==x-col||temp4==x-(col+1)||temp4==x-(col+2)||temp4==x-(col+3)))

{

```



```
}  
  
else if(temp3==row-1)  
  
{  
  
    goto gameend;  
  
}  
  
x=x-(col-1);  
  
goto update;  
  
gameend:  
count--;  
printf("Ball count is %d\n",count);  
clrscr();  
  
if(count>0)  
  
{  
  
x=col/2,m=row/2,n=col/2,l1=1,temp1=0,temp2=0,temp3=0,temp4=0,cc=0,choice='q';  
  
goto again;  
  
}  
  
else  
  
{printf("GAMEOVER\n");  
  
    goto gameend;  
  
}  
  
return 0;  
  
}
```

