**Project Title:** BINGO JUNIOR!!!

**Project Handler:**

* **Jannatul Ferdows Modina** (16172103078)
* **Farisa Benta Safir** (16172103049)
* **Rubiait Rabbana Ritu (16172103081)**
* **Famida Sultana Nishat(1617213076)**

**Project Duration:** 2 months.

**Amount Requested:** None.

**Background and Justification:** We used to play BINGO using our paper and pencil at the very beginning of our student life. Still now we feel nostalgic while we play this game. So

**Objective of The Project:**

* To create a project (console game) using **C**-programming language and their features.
* To implement features like control statement, conditional statement, 2D array, loops statement, random function etc.
* To make the program easy while running it.
* To concise the memory of program as far as possible.
* To get an idea about making a simple project using **C.**
* To be able to solve problems by Compiling and Debugging.

**Project Goals:**

* User friendly
* Reduced cost
* Less effort
* Easy maintenance

**Project Implementation and Management Plan:**

* **Expected project results**

System will be easy to use, user friendly environment, very little maintenance cost, runnable in any supported device (High, medium and low end device).

* **Project activities and work plan**

**Steps**

1. **Main Menu**
2. **Play multiplayer mode**
3. **Play again**
4. **Return to main menu**
5. **About data**
6. **Show About game**
7. **Return to main menu**
8. **Show About developers**
9. **Return to main menu**
10. **Exit**

**Project Monitoring:**

Project will be monitored to ensure that activities occur as planned. Appropriate corrective action will be taken if required.

**Hard Ware Requirement:**

* Intel Processor core i3 3rd gen

**Soft Ware Requirement:**

* Windows 7
* Code blocks

Game Rules:

There are two mode:

1. Single Player
2. Double Player

For single player:

* Run the game & press 1 for playing in single mode.
* For making table insert integers from 1 to 25 (use the integers only ones)
* By giving a number start your game and continue until you win or loose.
* For wining the game make one line 0 in your table vertically or horizontally or diagonally.

For double player:

1. Run the game & press 2 for playing in double mode.
2. For making table insert integers from 1 to 25 (use the integers only ones). Both 2 player.
3. While player one give a number then the game start and continue until anyone win or loose.
4. For wining the game make one line 0 in your table vertically or horizontally or diagonally.

* After finishing game you choose to play again or exit.
* Press 1 for play again
* Press 0 for exit.

Source code:

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

int check[27], vc[27];

int main() {

int a, b, c, d, arr[100][100], i, j, brr[100][100], sum[28], flag = 0, p, check[27], tmp, vc[27], vr[27], v, put = 0, ceck[27], chec[27];

time\_t t;

printf("\n\n\n\n\n\n Welcome\n");

printf(" Bingo Junior!!\n\n\n");

while (1) {

int m;

for (int modi = 1; modi <= 25; modi++) {

check[modi] = 0;

ceck[modi] = 0;

chec[modi]=0;

}

flag = 0;

d = 0;

put = 0;

printf("Select mode\n");

printf("1.Single player\n");

printf("2.Two players\n\n");

scanf("%d", &m);

//single player

if(m==1){

/\* Intializes random number generator \*/

srand((unsigned) time(&t));

//input table

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

//unique value insert in an array randomly

while(1){

tmp=0;

tmp = rand()%25+1;

if(check[tmp]!=1){

arr[i][j] = tmp;

check[arr[i][j]]=1;

break;

}

}

}

}

printf("Make your table\n\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

scanf("%d", & brr[i][j]);

if (brr[i][j] < 1 || brr[i][j] > 25 || ceck[brr[i][j]] == 1) {

printf("invalid input\n");

scanf("%d", & brr[i][j]);

}

ceck[brr[i][j]] = 1;

}

}

//print table player 2

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

printf("%d", brr[i][j]);

if (brr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n---|---|---|---|---|\n");

// printf("--|--|--|--|--|");

//printf("\n");

}

for (c = 0; c < 18; c++) {

printf("Give a number: \n\n");

printf("\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (j == 0) {

printf(" ");

}

printf("%d", brr[i][j]);

if (brr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

scanf("%d", & b);

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (arr[i][j] == b) {

arr[i][j] = 0;

}

}

}

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (brr[i][j] == b) {

brr[i][j] = 0;

}

}

}

printf("\n");

sum[0] = arr[0][0] + arr[0][1] + arr[0][2] + arr[0][3] + arr[0][4];

sum[1] = arr[1][0] + arr[1][1] + arr[1][2] + arr[1][3] + arr[1][4];

sum[2] = arr[2][0] + arr[2][1] + arr[2][2] + arr[2][3] + arr[2][4];

sum[3] = arr[3][0] + arr[3][1] + arr[3][2] + arr[3][3] + arr[3][4];

sum[4] = arr[4][0] + arr[4][1] + arr[4][2] + arr[4][3] + arr[4][4];

sum[5] = arr[0][0] + arr[1][0] + arr[2][0] + arr[3][0] + arr[4][0];

sum[6] = arr[0][1] + arr[1][1] + arr[2][1] + arr[3][1] + arr[4][1];

sum[7] = arr[0][2] + arr[1][2] + arr[2][2] + arr[3][2] + arr[4][2];

sum[8] = arr[0][3] + arr[1][3] + arr[2][3] + arr[3][3] + arr[4][3];

sum[9] = arr[0][4] + arr[1][4] + arr[2][4] + arr[3][4] + arr[4][4];

sum[10] = arr[0][0] + arr[1][1] + arr[2][2] + arr[3][3] + arr[4][4];

sum[11] = arr[0][4] + arr[1][3] + arr[2][2] + arr[3][1] + arr[4][0];

sum[12] = brr[0][0] + brr[0][1] + brr[0][2] + brr[0][3] + brr[0][4];

sum[13] = brr[1][0] + brr[1][1] + brr[1][2] + brr[1][3] + brr[1][4];

sum[14] = brr[2][0] + brr[2][1] + brr[2][2] + brr[2][3] + brr[2][4];

sum[15] = brr[3][0] + brr[3][1] + brr[3][2] + brr[3][3] + brr[3][4];

sum[16] = brr[4][0] + brr[4][1] + brr[4][2] + brr[4][3] + brr[4][4];

sum[17] = brr[0][0] + brr[1][0] + brr[2][0] + brr[3][0] + brr[4][0];

sum[18] = brr[0][1] + brr[1][1] + brr[2][1] + brr[3][1] + brr[4][1];

sum[19] = brr[0][2] + brr[1][2] + brr[2][2] + brr[3][2] + brr[4][2];

sum[20] = brr[0][3] + brr[1][3] + brr[2][3] + brr[3][3] + brr[4][3];

sum[21] = brr[0][4] + brr[1][4] + brr[2][4] + brr[3][4] + brr[4][4];

sum[22] = brr[0][0] + brr[1][1] + brr[2][2] + brr[3][3] + brr[4][4];

sum[23] = brr[0][4] + brr[1][3] + brr[2][2] + brr[3][1] + brr[4][0];

int k;

for (k = 12; k < 24; k++) {

if (sum[k] == 0) {

flag = 1;

printf(" Bingo!!\n");

printf(" You win\n\n\n\n");

printf("\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (j == 0) {

printf(" ");

}

printf("%d", brr[i][j]);

if (brr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

if (flag == 1) {

break;

}

for (k = 0; k < 12; k++) {

if (sum[k] == 0) {

int d = 1;

printf(" Ooopss\n");

printf(" you loose!\n better luck next time\n\n");

printf("Computers table:\n\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (j == 0) {

printf(" ");

}

printf("%d", arr[i][j]);

if (arr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

if (d == 1) {

break;

}

//check

if (flag == 0) {

{

a = arr[0][put];

if (arr[0][put] == 0) {

put++;

a = arr[0][put];

} else put++;

}

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (arr[i][j] == a) {

arr[i][j] = 0;

}

}

}

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (brr[i][j] == a) {

brr[i][j] = 0;

}

}

}

// printf("\n");

// printf("\n");

sum[0] = arr[0][0] + arr[0][1] + arr[0][2] + arr[0][3] + arr[0][4];

sum[1] = arr[1][0] + arr[1][1] + arr[1][2] + arr[1][3] + arr[1][4];

sum[2] = arr[2][0] + arr[2][1] + arr[2][2] + arr[2][3] + arr[2][4];

sum[3] = arr[3][0] + arr[3][1] + arr[3][2] + arr[3][3] + arr[3][4];

sum[4] = arr[4][0] + arr[4][1] + arr[4][2] + arr[4][3] + arr[4][4];

sum[5] = arr[0][0] + arr[1][0] + arr[2][0] + arr[3][0] + arr[4][0];

sum[6] = arr[0][1] + arr[1][1] + arr[2][1] + arr[3][1] + arr[4][1];

sum[7] = arr[0][2] + arr[1][2] + arr[2][2] + arr[3][2] + arr[4][2];

sum[8] = arr[0][3] + arr[1][3] + arr[2][3] + arr[3][3] + arr[4][3];

sum[9] = arr[0][4] + arr[1][4] + arr[2][4] + arr[3][4] + arr[4][4];

sum[10] = arr[0][0] + arr[1][1] + arr[2][2] + arr[3][3] + arr[4][4];

sum[11] = arr[0][4] + arr[1][3] + arr[2][2] + arr[3][1] + arr[4][0];

//player 2

sum[12] = brr[0][0] + brr[0][1] + brr[0][2] + brr[0][3] + brr[0][4];

sum[13] = brr[1][0] + brr[1][1] + brr[1][2] + brr[1][3] + brr[1][4];

sum[14] = brr[2][0] + brr[2][1] + brr[2][2] + brr[2][3] + brr[2][4];

sum[15] = brr[3][0] + brr[3][1] + brr[3][2] + brr[3][3] + brr[3][4];

sum[16] = brr[4][0] + brr[4][1] + brr[4][2] + brr[4][3] + brr[4][4];

sum[17] = brr[0][0] + brr[1][0] + brr[2][0] + brr[3][0] + brr[4][0];

sum[18] = brr[0][1] + brr[1][1] + brr[2][1] + brr[3][1] + brr[4][1];

sum[19] = brr[0][2] + brr[1][2] + brr[2][2] + brr[3][2] + brr[4][2];

sum[20] = brr[0][3] + brr[1][3] + brr[2][3] + brr[3][3] + brr[4][3];

sum[21] = brr[0][4] + brr[1][4] + brr[2][4] + brr[3][4] + brr[4][4];

sum[22] = brr[0][0] + brr[1][1] + brr[2][2] + brr[3][3] + brr[4][4];

sum[23] = brr[0][4] + brr[1][3] + brr[2][2] + brr[3][1] + brr[4][0];

//if player 1 win

int k;

for (k = 0; k < 12; k++) {

if (sum[k] == 0) {

flag = 1;

printf(" Ooopss\n");

printf(" you loose!\n better luck next time\n\n\n");

printf("Computers table:\n\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (j == 0) {

printf(" ");

}

printf("%d", arr[i][j]);

if (arr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

if (flag == 1) {

break;

}

for (k = 12; k < 24; k++) {

if (sum[k] == 0) {

int d = 1;

printf(" Bingo!!\n");

printf(" You win\n\n\n\n\n");

printf("\n");

for (i = 0; i < 5; i++) {

for (j = 0; j < 5; j++) {

if (j == 0) {

printf(" ");

}

printf("%d", brr[i][j]);

if (brr[i][j] > 9) {

printf(" |");

} else {

printf(" |");

}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

if (d == 1) {

break;

}

}

}

}

}

else {

printf("Player 1 make your table\n\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

scanf("%d",&arr[i][j]);

if(arr[i][j]<1 || arr[i][j]>25 || check[arr[i][j]]==1){

printf("invalid input\n");

scanf("%d",&arr[i][j]);

}

check[arr[i][j]]=1;

}

}

printf("\n\n\nPlayer 1 table:\n");

printf("--- --- --- --- ---\n");

//printf("\n");

//printf("\n");

//printf("-- -- -- -- --");

// printf("-- -- -- -- --");

//printf("\n");

//print player 1 table

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

printf("%d",arr[i][j]);

if(arr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf("---|---|---|---|---|");

printf("\n");

}

//input table player 2

printf("Player 2 make your table\n\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

scanf("%d",&brr[i][j]);

if(brr[i][j]<1 || brr[i][j]>25 || chec[brr[i][j]]==1){

printf("invalid input\n");

scanf("%d",&brr[i][j]);

}

chec[brr[i][j]]=1;

}

}

//print table player 2

printf("\n\n\n\n\nPlayer 2 table:\n");

printf("--- --- --- --- ---\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

printf("%d",brr[i][j]);

if(brr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n---|---|---|---|---|\n");

// printf("--|--|--|--|--|");

//printf("\n");

}

for(c=0;c<18;c++)

{

printf("player 1 give a number: \n\n\n");

printf("\n\n\n\n\nPlayer 1 table:\n");

printf(" --- --- --- --- ---\n");

//printf("\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",arr[i][j]);

if(arr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

scanf("%d",&a);

printf("\n");

//make an element 0 in table 1

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(arr[i][j]==a)

{

arr[i][j]=0;

}

}

}

// printf("\n");

//make an element 0 in table 2

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(brr[i][j]==a)

{

brr[i][j]=0;

}

}

}

//check win

//player 1

sum[0]=arr[0][0]+arr[0][1]+arr[0][2]+arr[0][3]+arr[0][4];

sum[1]=arr[1][0]+arr[1][1]+arr[1][2]+arr[1][3]+arr[1][4];

sum[2]=arr[2][0]+arr[2][1]+arr[2][2]+arr[2][3]+arr[2][4];

sum[3]=arr[3][0]+arr[3][1]+arr[3][2]+arr[3][3]+arr[3][4];

sum[4]=arr[4][0]+arr[4][1]+arr[4][2]+arr[4][3]+arr[4][4];

sum[5]=arr[0][0]+arr[1][0]+arr[2][0]+arr[3][0]+arr[4][0];

sum[6]=arr[0][1]+arr[1][1]+arr[2][1]+arr[3][1]+arr[4][1];

sum[7]=arr[0][2]+arr[1][2]+arr[2][2]+arr[3][2]+arr[4][2];

sum[8]=arr[0][3]+arr[1][3]+arr[2][3]+arr[3][3]+arr[4][3];

sum[9]=arr[0][4]+arr[1][4]+arr[2][4]+arr[3][4]+arr[4][4];

sum[10]=arr[0][0]+arr[1][1]+arr[2][2]+arr[3][3]+arr[4][4];

sum[11]=arr[0][4]+arr[1][3]+arr[2][2]+arr[3][1]+arr[4][0];

//player 2

sum[12]=brr[0][0]+brr[0][1]+brr[0][2]+brr[0][3]+brr[0][4];

sum[13]=brr[1][0]+brr[1][1]+brr[1][2]+brr[1][3]+brr[1][4];

sum[14]=brr[2][0]+brr[2][1]+brr[2][2]+brr[2][3]+brr[2][4];

sum[15]=brr[3][0]+brr[3][1]+brr[3][2]+brr[3][3]+brr[3][4];

sum[16]=brr[4][0]+brr[4][1]+brr[4][2]+brr[4][3]+brr[4][4];

sum[17]=brr[0][0]+brr[1][0]+brr[2][0]+brr[3][0]+brr[4][0];

sum[18]=brr[0][1]+brr[1][1]+brr[2][1]+brr[3][1]+brr[4][1];

sum[19]=brr[0][2]+brr[1][2]+brr[2][2]+brr[3][2]+brr[4][2];

sum[20]=brr[0][3]+brr[1][3]+brr[2][3]+brr[3][3]+brr[4][3];

sum[21]=brr[0][4]+brr[1][4]+brr[2][4]+brr[3][4]+brr[4][4];

sum[22]=brr[0][0]+brr[1][1]+brr[2][2]+brr[3][3]+brr[4][4];

sum[23]=brr[0][4]+brr[1][3]+brr[2][2]+brr[3][1]+brr[4][0];

//if player 1 win

int k;

for(k=0;k<12;k++)

{

if(sum[k]==0)

{

flag=1;

printf(" Bingo\n");

printf(" player 1 win\n\n\n");

printf("\n\n\n\n\nPlayer 1 table:\n");

printf(" --- --- --- --- ---");

printf("\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",arr[i][j]);

if(arr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

//check game over

if(flag==1)

{

break;

}

//if player 2 win

for(k=12;k<24;k++)

{

if(sum[k]==0)

{

d=1;

printf(" Bingo\n");

printf(" player 2 win\n\n\n");

printf("\n");

printf("\n\n\n\n\nPlayer 2 table:\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",brr[i][j]);

if(brr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

//check game over

if(d==1)

{

break;

}

//continue game

if(flag==0) {printf("player 2 give a number: \n\n");

printf("\n");

printf("\n\n\n\n\nPlayer 2 table:\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",brr[i][j]);

if(brr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

scanf("%d",&b);

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(arr[i][j]==b)

{

arr[i][j]=0;

}

}

}

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(brr[i][j]==b)

{

brr[i][j]=0;

}

}

}

printf("\n");

sum[0]=arr[0][0]+arr[0][1]+arr[0][2]+arr[0][3]+arr[0][4];

sum[1]=arr[1][0]+arr[1][1]+arr[1][2]+arr[1][3]+arr[1][4];

sum[2]=arr[2][0]+arr[2][1]+arr[2][2]+arr[2][3]+arr[2][4];

sum[3]=arr[3][0]+arr[3][1]+arr[3][2]+arr[3][3]+arr[3][4];

sum[4]=arr[4][0]+arr[4][1]+arr[4][2]+arr[4][3]+arr[4][4];

sum[5]=arr[0][0]+arr[1][0]+arr[2][0]+arr[3][0]+arr[4][0];

sum[6]=arr[0][1]+arr[1][1]+arr[2][1]+arr[3][1]+arr[4][1];

sum[7]=arr[0][2]+arr[1][2]+arr[2][2]+arr[3][2]+arr[4][2];

sum[8]=arr[0][3]+arr[1][3]+arr[2][3]+arr[3][3]+arr[4][3];

sum[9]=arr[0][4]+arr[1][4]+arr[2][4]+arr[3][4]+arr[4][4];

sum[10]=arr[0][0]+arr[1][1]+arr[2][2]+arr[3][3]+arr[4][4];

sum[11]=arr[0][4]+arr[1][3]+arr[2][2]+arr[3][1]+arr[4][0];

sum[12]=brr[0][0]+brr[0][1]+brr[0][2]+brr[0][3]+brr[0][4];

sum[13]=brr[1][0]+brr[1][1]+brr[1][2]+brr[1][3]+brr[1][4];

sum[14]=brr[2][0]+brr[2][1]+brr[2][2]+brr[2][3]+brr[2][4];

sum[15]=brr[3][0]+brr[3][1]+brr[3][2]+brr[3][3]+brr[3][4];

sum[16]=brr[4][0]+brr[4][1]+brr[4][2]+brr[4][3]+brr[4][4];

sum[17]=brr[0][0]+brr[1][0]+brr[2][0]+brr[3][0]+brr[4][0];

sum[18]=brr[0][1]+brr[1][1]+brr[2][1]+brr[3][1]+brr[4][1];

sum[19]=brr[0][2]+brr[1][2]+brr[2][2]+brr[3][2]+brr[4][2];

sum[20]=brr[0][3]+brr[1][3]+brr[2][3]+brr[3][3]+brr[4][3];

sum[21]=brr[0][4]+brr[1][4]+brr[2][4]+brr[3][4]+brr[4][4];

sum[22]=brr[0][0]+brr[1][1]+brr[2][2]+brr[3][3]+brr[4][4];

sum[23]=brr[0][4]+brr[1][3]+brr[2][2]+brr[3][1]+brr[4][0];

for(k=12;k<24;k++)

{

if(sum[k]==0)

{

flag=1;

printf(" Bingo\n");

printf(" player 2 win\n\n\n");

printf("\n");

printf("\n\n\n\n\nPlayer 2 table:\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",brr[i][j]);

if(brr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

}

if(flag==1)

{

break;

}

for(k=0;k<12;k++)

{

if(sum[k]==0)

{

flag=1;

printf(" Bingo\n");

printf(" player 1 win\n\n\n");

printf("\n\n\n\n\nPlayer 1 table:\n");

printf(" --- --- --- --- ---");

printf("\n");

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

if(j==0)

{

printf(" ");

}

printf("%d",arr[i][j]);

if(arr[i][j]>9)

{printf(" |");}

else

{printf(" |");}

}

printf("\n");

printf(" ---|---|---|---|---|");

printf("\n");

}

}

}

if(flag==1)

{

break;

}

}

}

printf("Press 1 to play again\n or 0 to end game\n");

scanf("%d", & p);

if (p == 0) {

break;

}

printf("%d\n", p);

}

return 0;

}

**Appendix:**

As a whole, the project will be a good learning experience for us. We will be gained knowledge about the various aspects of C. At the same time, we will be developed a deep understanding about the application developing interface.