

Final project

```
#include<bits/stdc++.h>
#include<graphics.h>
#include<cmath>
using namespace std;
void Simple_name();
void Emoji();
void DDA();
void Flag();
void Moving_emoji();
void house();
void moving_car_Stop();
void first_stop();
void finish();
void condition();
void moving_car();

int main()
{
    int i,c;
    cout << "      Menu..\n";
    cout << "=====\\n";
    cout << " 1. Simple Name.\\n";
    cout << " 2. Emoji.\\n";
    cout << " 3. DDA.\\n";
    cout << " 4. Flag.\\n";
    cout << " 5. Moving emoji.\\n";
    cout << " 6. House.\\n";
```

```
cout << " 7. Moving car.\n";
cout << " 0. Exit.\n";
cout << "=====\n";
while(1)
{

    cout << "Enter your choice:-";
    cin>>c;
    cout << "-----\n";
    switch(c)
    {
    case 1:

        Simple_name();
        break;
    case 2:

        Emoji();
        break;
    case 3:

        DDA();
        break;
    case 4:

        Flag();
        break;
    case 5:

        Moving_emoji();
        break;
    case 6:
```

```
        house();
        break;
    case 7:
        moving_car();
        break;
    case 0:
        exit(0);
    default:
        cout << "Your choice is wrong..\n";

    }
}

return 0;
}

void Simple_name()
{
    initwindow(200,200,"NAME"); //Tuhin name print.
    line(10,10,30,10);
    line(20,10,20,50);
    line(40,10,40,50);
    line(60,10,60,50);
    line(40,50,60,50);
    line(80,10,80,50);
    line(100,10,100,50);
    line(80,30,100,30);
    line(120,10,120,50);
    line(140,10,140,50);
```

```
    line(140,10,160,50);
    line(160,10,160,50);

}

void Emoji()
{
    initwindow(600,600,"Emoji");

    setcolor(RED);
    circle(300,200,70);
    setfillstyle(1,GREEN);
    floodfill(315, 215, RED);

    setcolor(WHITE);
    circle(275,170,12);
    setfillstyle(1,BLACK);
    floodfill(276,171,WHITE);

    setcolor(WHITE);
    circle(320,170,12);
    setfillstyle(1,BLACK);
    floodfill(325,171,WHITE);

    setcolor(WHITE);
    line(285, 200, 305, 200);
    line(285,200, 295, 210);
    line(295,210,305,200);
```

```

setfillstyle(1,BLACK);
floodfill(290,203,WHITE);

setcolor(RED);
line(280,230,310,230);
ellipse(295,230,180,360,15,11);
setfillstyle(4,BLACK);
floodfill(296,231,RED);

}

void DDA()
{
    float x1,x2,y1,y2,step;

    initwindow(700,700,"DDA..");
    cout<<("Enter the x1 & y1:");
    cin >>x1>>y1;

    cout<<("Enter the x2 & y2:");
    cin >>x2>>y2;

    int dx=abs(x2-x1);
    int dy=abs(y2-y1);
    //cout << dx <<" " << dy << endl;

    if(dx>dy)
    {

```

```

        step=dx;
    }
    else
    {
        step = dy;
    }
    //cout << "Step :" << step << endl;

    float xin,yin;
    xin=dx/step;
    yin=dy/step;
    //cout << xin <<" " << yin << endl;

    int x=x1;
    int y=y1;
    for(int i=0; i<step; i++)
    {
        putpixel(x,y,RED);
        x=x+xin;
        y=y+yin;
        // cout << x <<" " << y << endl;
        delay(200);
    }

}

void Flag()
{
    initwindow(600,600,"Flag..");
    setcolor(WHITE);
    rectangle(200,150,450,250);

```

```

    setfillstyle(1, GREEN);
    floodfill(210, 170, WHITE);
    rectangle(190, 150, 200, 450);
    setfillstyle(1, 12);
    floodfill(195, 170, WHITE);
    circle(325, 200, 35);
    setfillstyle(1, RED);
    floodfill(325, 200, WHITE);

}

void Moving_emoji()
{
    initwindow(850, 600, "Moving emoji..");

    for(int i=0; i<700; i=i+10)
    {
        line(0, 550, 850, 550); //Base line
        setcolor(WHITE);
        line(70+i, 400, 20+i, 490);
        line(70+i, 400, 110+i, 490);
        line(20+i, 490, 110+i, 490); //triangle close
        setfillstyle(1, GREEN);
        floodfill(71+i, 420, WHITE);
        line(10+i, 490, 120+i, 490);
        line(10+i, 490, 17+i, 530);
        line(120+i, 490, 111+i, 530);
    }
}

```

```

    line(111+i,530,17+i,530);
    setfillstyle(3,YELLOW);
    floodfill(71+i,500,WHITE);

    delay(50);

    cleardevice();
}
//last triangle
line(0,550,850,550); //Base line
setcolor(WHITE);
line(770,400,720,490);
line(770,400,810,490);
line(720,490,810,490); //triangle close
setfillstyle(1,GREEN);
floodfill(771,420,WHITE);

line(710,490,820,490);
line(710,490,717,530);
line(820,490,811,530);
line(811,530,717,530);
setfillstyle(3,YELLOW);
floodfill(771,500,WHITE);

}
void house()
{

```



```
initwindow(800,600,"HOUSE");
```

```
setcolor(WHITE);
```

```
circle(150,150,50);//sun
```

```
setfillstyle(1,RED);
```

```
floodfill(125,124,WHITE);
```

```
//boarder
```

```
line(50,50,750,50);
```

```
line(50,50,50,550);
```

```
line(750,50,750,550);
```

```
line(50,550,750,550);
```

```
//house
```

```
line(250,200,450,200);//upper line
```

```
line(250,200,280,275);
```

```
line(280,275,500,275);
```

```
line(500,275,450,200);
```

```
setfillstyle(1,YELLOW);
```

```
floodfill(255,205,WHITE);
```

```
line(283,275,283,400);//middle line
```

```
line(500,275,500,400);
```

```
line(283,400,500,400);
```

```
setfillstyle(4,GREEN);
```

```
floodfill(288,305,WHITE);
```

```
line(278,410,505,410);//base line
line(283,400,278,410);
line(500,400,505,410);
setfillstyle(1,RED);
floodfill(285,405,WHITE);
```

```
line(250,200,180,285);//Inside line
line(189,275,189,395);
line(189,395,283,400);
setfillstyle(3,GREEN);
floodfill(192,277,WHITE);
line(189,395,185,405);
line(185,405,278,410);
setfillstyle(1,RED);
floodfill(277,409,WHITE);
```

```
rectangle(220,315,250,355);
setfillstyle(4,BLACK);
floodfill(223,325,WHITE);
```

```
line(353,315,353,400);//door
line(353,315,420,315);
line(420,315,420,400);
setfillstyle(4,BLACK);
floodfill(355,316,WHITE);
line(353,315,370,330);//door left
```

```
line(370,330,370,400);  
setfillstyle(4,9);  
floodfill(354,333,WHITE);  
line(420,315,403,330);//door right  
line(403,330,403,400);  
setfillstyle(4,9);  
floodfill(405,335,WHITE);
```

```
line(370,410,380,520);//road  
line(410,410,430,520);  
line(50,520,380,520);  
line(430,520,705,520);  
line(705,50,705,520);  
setfillstyle(1,RED);  
floodfill(55,525,WHITE);
```

```
line(50,335,189,335);//house left corner  
line(50,305,100,275);  
line(100,275,189,320);  
setfillstyle(1,11);  
floodfill(55,315,WHITE);  
line(500,335,590,335);//house right corner  
line(500,305,545,275);  
line(545,275,590,315);  
setfillstyle(1,GREEN);  
floodfill(570,310,WHITE);
```

```
rectangle(590,275,615,355);//tree
```

```
    setfillstyle(1,RED);
    floodfill(592,277,WHITE);
    line(602,225,590,250);//tree body
    line(602,225,615,250);
    line(590,250,595,250);
    line(595,250,580,275);
    line(615,250,610,250);
    line(610,250,625,275);
    line(580,275,625,275);
    setfillstyle(1,GREEN);
    floodfill(596,270,WHITE);

    line(615,335,705,335);//tree right
    line(615,315,660,275);
    line(660,275,705,310);
    setfillstyle(1,11);
    floodfill(625,315,WHITE);

    setfillstyle(1,GREEN);
    floodfill(60,450,WHITE);
    setfillstyle(1,WHITE);
    floodfill(60,100,WHITE);

}
void moving_car()
{
```

```

int i, j = 0, gd = DETECT, gm;
//initgraph(&gd, &gm, "");

initwindow(950,600,"Moving car.");

for (i = 0; i <= 300; i = i + 10)
{
    setcolor(WHITE);
    line(0,400,950,400);
    line(0,400,0,410);
    line(950,400,950,410);
    line(0,410,950,410);
    setfillstyle(1,12);
    floodfill(10,405,WHITE);

    outtextxy(5,250,"START..");

    // body
    line(0 + i, 300, 210 + i, 300);
    line(50 + i, 300, 75 + i, 270);
    line(75 + i, 270, 150 + i, 270);
    line(150 + i, 270, 165 + i, 300);
    line(0 + i, 300, 0 + i, 330);
    line(210 + i, 300, 210 + i, 330);
    setfillstyle(1,GREEN);
    floodfill(76+i,299,WHITE);

```

```
// left wheel
```

```
circle(65 + i, 330, 15);
```

```
setfillstyle(5,BROWN);
```

```
floodfill(65+i,329,WHITE);
```

```
circle(65 + i, 330, 2);
```

```
circle(145 + i, 330, 15);// right wheel
```

```
setfillstyle(5,BROWN);
```

```
floodfill(146+i,329,WHITE);
```

```
circle(145 + i, 330, 2);
```

```
line(0 + i, 330, 50 + i, 330);// left of left wheel
```

```
line(80 + i, 330, 130 + i, 330);// middle of both wheel
```

```
line(210 + i, 330, 160 + i, 330);// right of right wheel
```

```
setfillstyle(1,YELLOW);
```

```
floodfill(81+i,315,WHITE);
```

```
delay(100);
```

```
cleardevice();
```

```
}
```

```
first_stop();
```

```
delay(500);
```

```
condition();
```

```
}
```

```
void condition()
```

```
{
```

```
    rectangle(515,230,521,300); //stop rectangle
```

```
    setfillstyle(1, GREEN);
```

```
    floodfill(516,232, WHITE);
```

```
    circle(519,210,20); //stop circle
```

```
    setfillstyle(1, RED);
```

```
    floodfill(520,215, WHITE);
```

```
    outtextxy(505,203, "stop");
```

```
    delay(300);
```

```
    outtextxy(530,260, "Are you finish the task.");
```

```
    cout << "Are you finish the task." << endl;
```

```
    string c;
```

```
    cin >> c;
```

```
    if(c == "yes")
```

```
    {
```

```
        outtextxy(460,260, "YES...");
```

```
        cout << "Yes.\n";
```

```
        delay(800);
```

```
        cleardevice();
```

```

    first_stop();
    cout << "Ok you will go\n";
    outtextxy(530,260,"OK YOU WILL GO");
    delay(2000);
    cleardevice();
    first_stop();
    outtextxy(460,260,"let's go...");
    delay(2000);
    finish();

    moving_car_Stop();

}
else if(c=="no")
{
    cout << "No.\n";
    outtextxy(460,260,"NO...");
    delay(500);
    cleardevice();

}
else
{
    cout << "Your request not right.";

}

}

```



```

void first_stop()
{
    setcolor(WHITE);
    line(0,400,950,400);
    line(0,400,0,410);
    line(950,400,950,410);
    line(0,410,950,410);
    setfillstyle(1,12);
    floodfill(10,405,WHITE);

    // body
    line(300, 300, 510, 300);
    line(350, 300, 375, 270);
    line(375, 270, 450, 270);
    line(450, 270, 465, 300);
    line(300, 300, 300, 330);
    line(510, 300, 510, 330);
    setfillstyle(1,GREEN);
    floodfill(376,299,WHITE);

    // left wheel
    circle(365, 330, 15);
    setfillstyle(5,BROWN);
    floodfill(365,329,WHITE);
    circle(365, 330, 2);

    circle(445, 330, 15); // right wheel
    setfillstyle(5,BROWN);

```

```
floodfill(446,329,WHITE);
```

```
circle(445, 330, 2);
```

```
line(300, 330, 350, 330); // left of left wheel
```

```
line(380, 330, 430, 330); // middle of both wheel
```

```
line(510, 330, 460, 330); // right of right wheel
```

```
setfillstyle(1,YELLOW);
```

```
floodfill(381,315,WHITE);
```

```
}
```

```
void finish()
```

```
{
```

```
for ( int i = 510; i <= 700; i = i + 10)
```

```
{
```

```
    setcolor(WHITE);
```

```
    line(0,400,950,400);
```

```
    line(0,400,0,410);
```

```
    line(950,400,950,410);
```

```
    line(0,410,950,410);
```

```
    setfillstyle(1,12);
```

```
    floodfill(10,405,WHITE);
```

```
    // body
```

```
    line(0 + i, 300, 210 + i, 300);
```

```
    line(50 + i, 300, 75 + i, 270);
```

```
line(75 + i, 270, 150 + i, 270);  
line(150 + i, 270, 165 + i, 300);  
line(0 + i, 300, 0 + i, 330);  
line(210 + i, 300, 210 + i, 330);  
setfillstyle(1, GREEN);  
floodfill(76+i, 299, WHITE);
```

```
// left wheel  
circle(65 + i, 330, 15);  
setfillstyle(5, BROWN);  
floodfill(65+i, 329, WHITE);  
circle(65 + i, 330, 2);
```

```
circle(145 + i, 330, 15); // right wheel  
setfillstyle(5, BROWN);  
floodfill(146+i, 329, WHITE);  
circle(145 + i, 330, 2);
```

```
line(0 + i, 330, 50 + i, 330); // left of left wheel  
line(80 + i, 330, 130 + i, 330); // middle of both wheel  
line(210 + i, 330, 160 + i, 330); // right of right wheel  
setfillstyle(1, YELLOW);  
floodfill(81+i, 315, WHITE);  
delay(100);  
cleardevice();
```

```

    }

}

void moving_car_Stop()
{
    setcolor(WHITE);
    line(0,400,950,400);
    line(0,400,0,410);
    line(950,400,950,410);
    line(0,410,950,410);
    setfillstyle(1,12);
    floodfill(10,405,WHITE);

    // body
    line(700, 300, 910, 300);
    line(750, 300, 775, 270);
    line(775, 270, 850, 270);
    line(850, 270, 865, 300);
    line(700, 300, 700, 330);
    line(910, 300, 910, 330);
    setfillstyle(1,GREEN);
    floodfill(776,299,WHITE);

    // left wheel
    circle(765, 330, 15);
    setfillstyle(5,BROWN);
    floodfill(765,329,WHITE);
    circle(765, 330, 2);

```

```
// right wheel
circle(845, 330, 15);
setfillstyle(5,BROWN);
floodfill(846,329,WHITE);
circle(845, 330, 2);

line(700, 330, 750, 330); // left of left wheel
line(780, 330, 830, 330); // middle of both wheel
line(910, 330, 860, 330); // right of right wheel
setfillstyle(1,YELLOW);
floodfill(781,315,WHITE);
outtextxy(890,250,"FINISH..");
}
```

Select C:\Users\TUHIN\Desktop\FinalProject.exe

```
Menu..
=====
1. Simple Name.
2. Emoji.
3. DDA.
4. Flag.
5. Moving emoji.
6. House.
7. Moving car.
0. Exit.
=====
Enter your choice:-
```





