Lab Report

Course Title: Computer Graphics Lab
Course Code: CSE-4742

Spring-2022

Lab No: 2

Name of Labworks:

1. Draw a line, circle, rectangle
2. Draw A, B
3. Draw Bangla Ka, Kha
4. Draw smiling face
5. Draw Bangladeshi Flag
6. Draw Shahid Minar
7. Draw Sriti Shoudho

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Date of Submission : 25-08-2022

Marks :

Name of Lab 1.1: Draw Line .

Source Code:

```c
/*C graphics program to draw a line.*/

#include <graphics.h>
#include <conio.h>



main()
{
   int gd = DETECT, gm;

   //init graphics
   initgraph(&gd, &gm, (char*) "");



   line(225,40,50,40);    //will draw a horizontal line

   getch();
   closegraph();
   return 0;
}
```

Result:
Input: 225,40,50,40

Output:

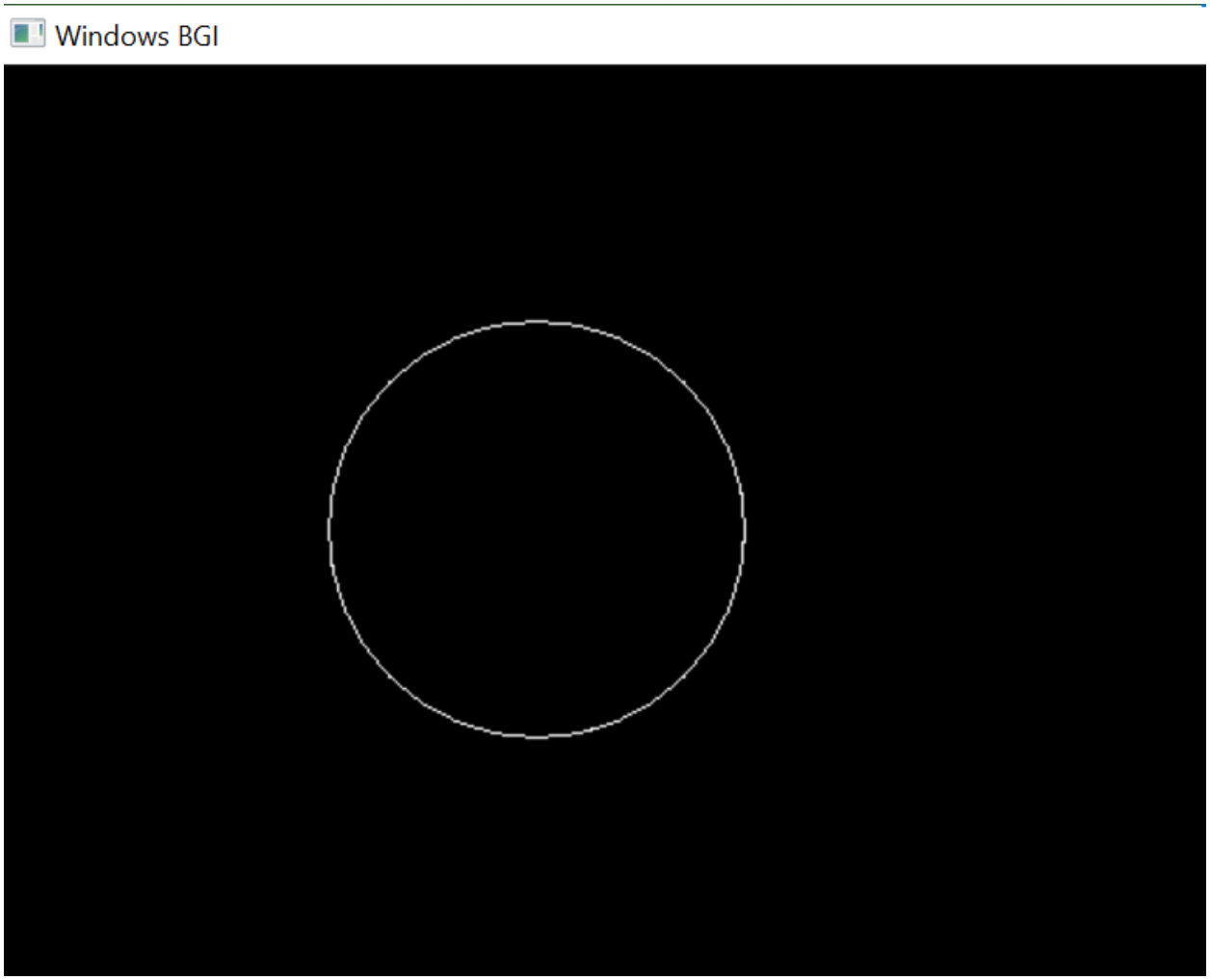
Name of Lab 1.2: Draw a Circle.

Source Code:

```
/*C graphics program to draw a line.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");

    circle(230,200,90);


    getch();
    closegraph();
    return 0;
}
```

Result:
Input:230,200,90

Output:

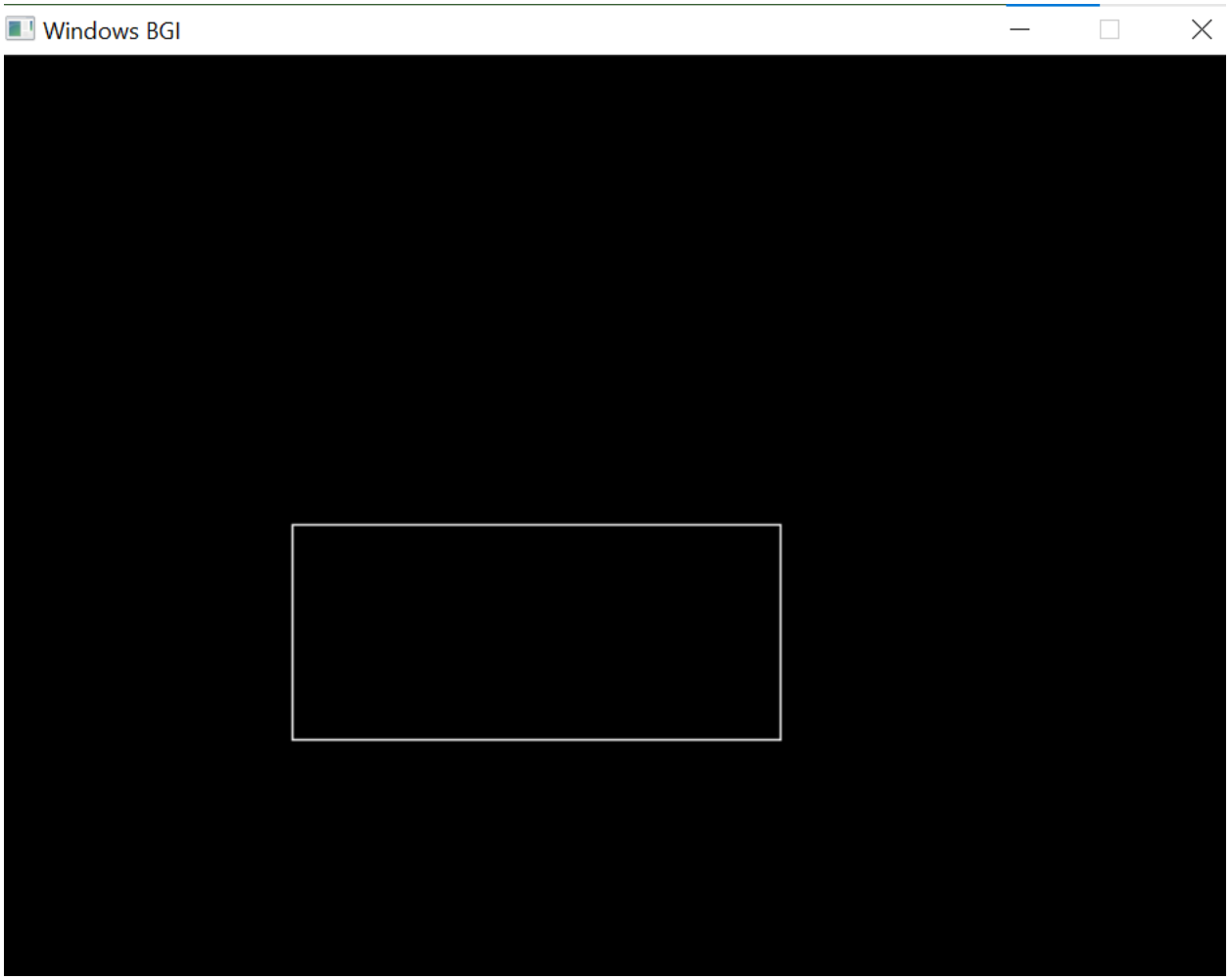


Name of Lab 1.3: Draw a Rectangle.

Source Code:

```c
/*C graphics program to draw a Rectangle.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");

// rectangle left top right bottom

    rectangle(150, 240, 400,350);



    getch();
    closegraph();
    return 0;
}
```

Result:
Input:150, 240, 400,350
Output:



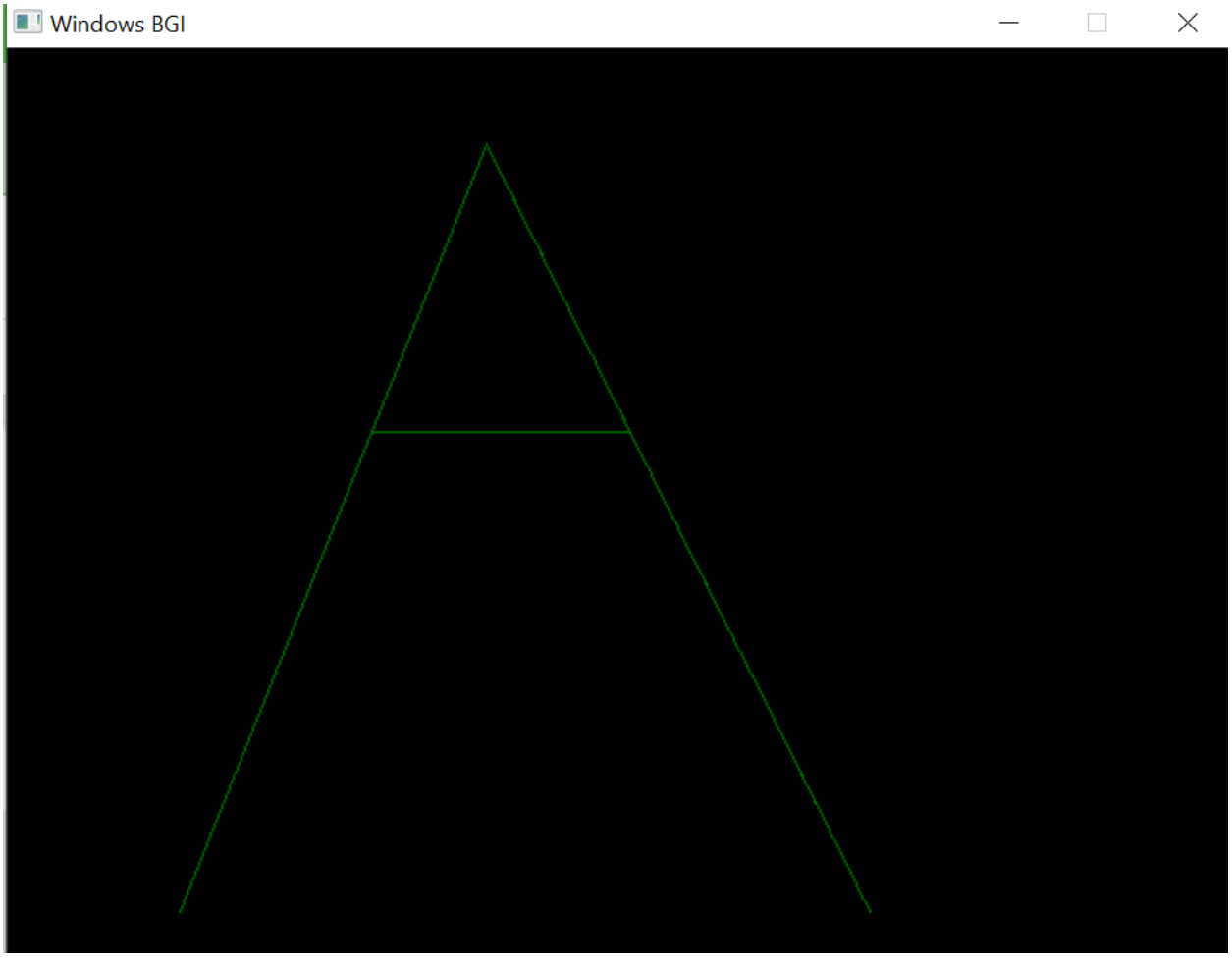
Name of Lab 2.1: Draw A.
Source Code:

```
/*C graphics program to draw a Char A.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
```

```
    initgraph(&gd, &gm, (char*) "");
// x1, y1 , x2, y2
    setcolor(GREEN);
    line(250,50,450,450);
    line(325,200,190,200);
    line(250,50,90,450);
    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:

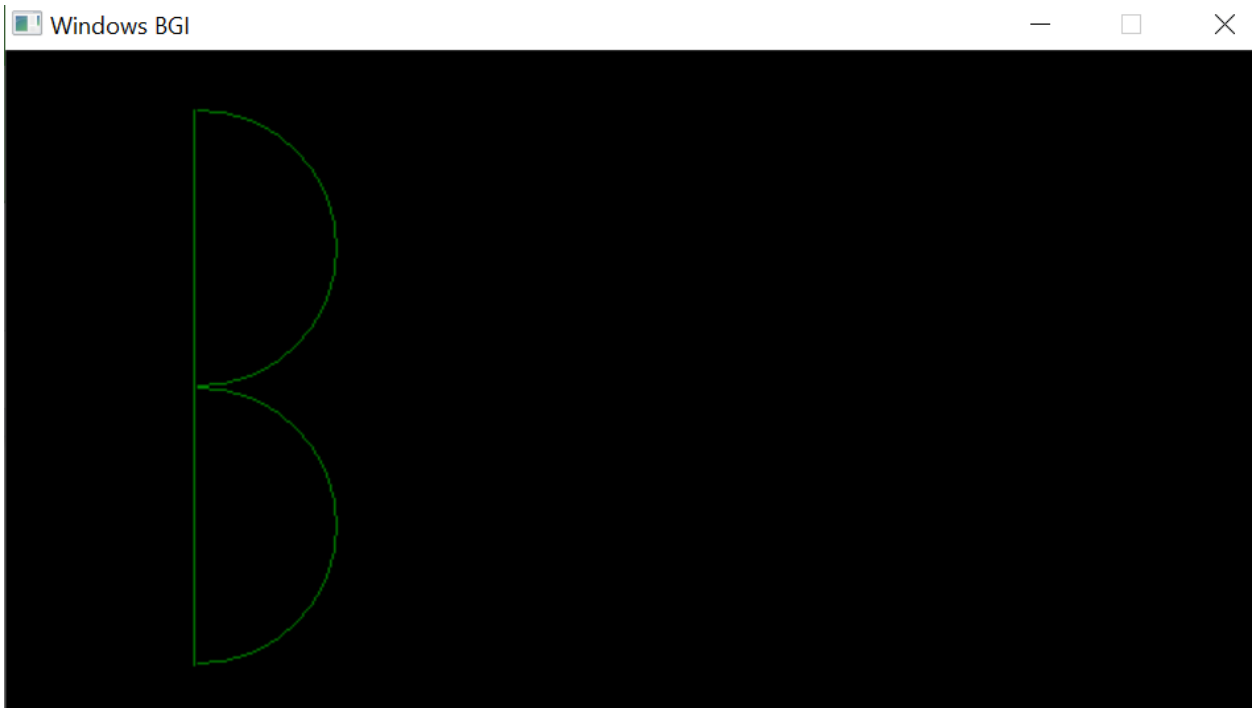


Name of Lab 2.2: Draw B.
Source Code:

```
/*C graphics program to draw a B.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;
    //init graphics
    initgraph(&gd, &gm, (char*) "");
// x1, y1 , x2, y2
    setcolor(GREEN);
    line(95,30,95,310);
    arc(98,100,270,90,70);
    arc(98,240,270,90,70);
    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:

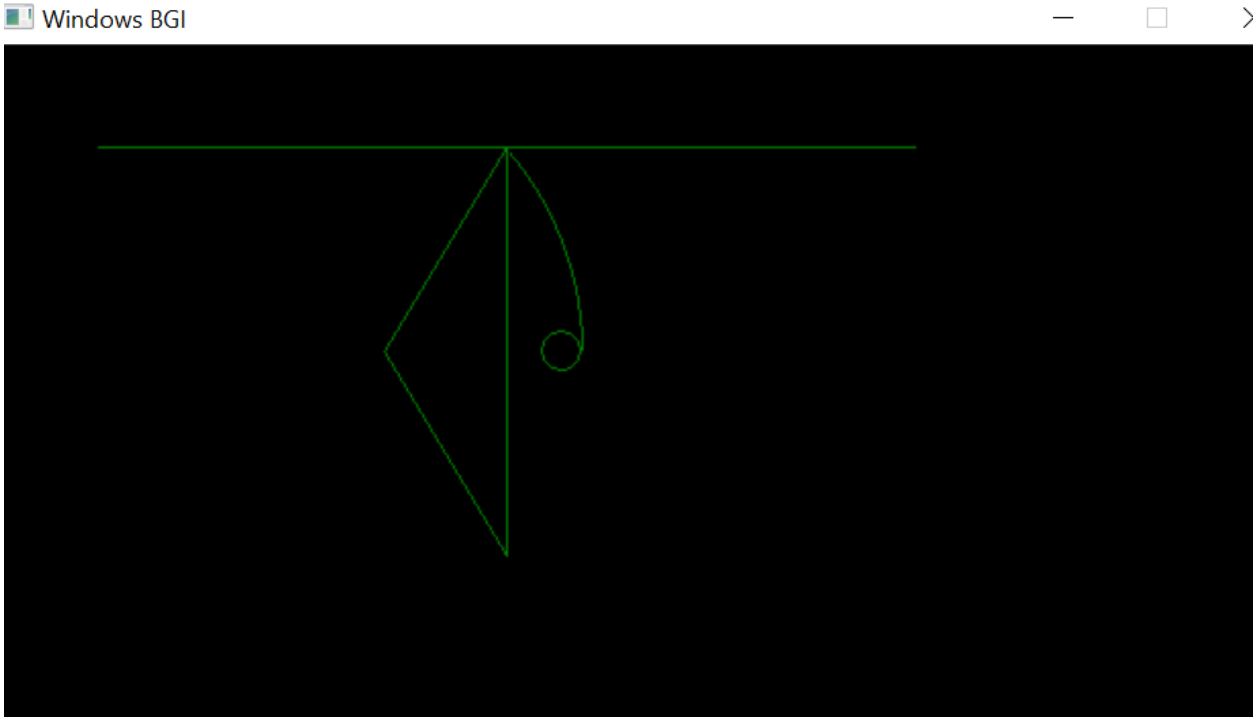


Name of Lab 3.1: Draw Bangla Ka
Source Code:

```
/*C graphics program to draw a Ka.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");
// x1, y1 , x2, y2
    setcolor(GREEN);
    line(50,50,450,50);
    line(250,50,190,150);

    line(190,150,250,250);
    line(250,50,250,250);
    arc(138,150,360,40,150);
    circle(277,150,10);
    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:



Name of Lab 3.2: Draw Bangla Kha

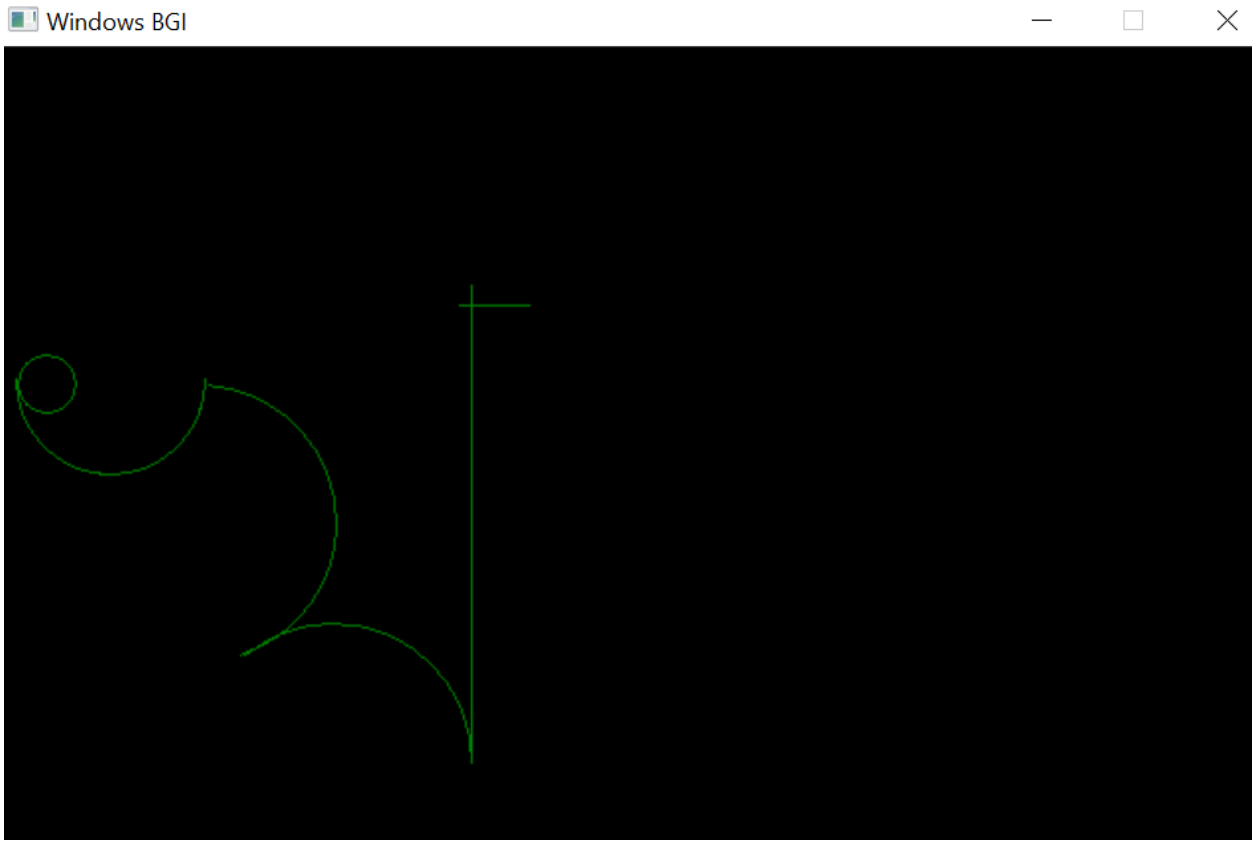
Source Code:

```
/*C graphics program to draw a Kha.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");
// x1, y1 , x2, y2
    setcolor(GREEN);
    line(236,120,236,360);
    line(265,130,230,130);
    arc(55,168,180,360,48);
    circle(23,170,15);
//arc(98,100 ,180,270,60);
    arc(99,240,289,85,70);

    arc(167,360,360,130,70);
    getch();
    closegraph();
    return 0;
}
```

Result:

Input:

Output:

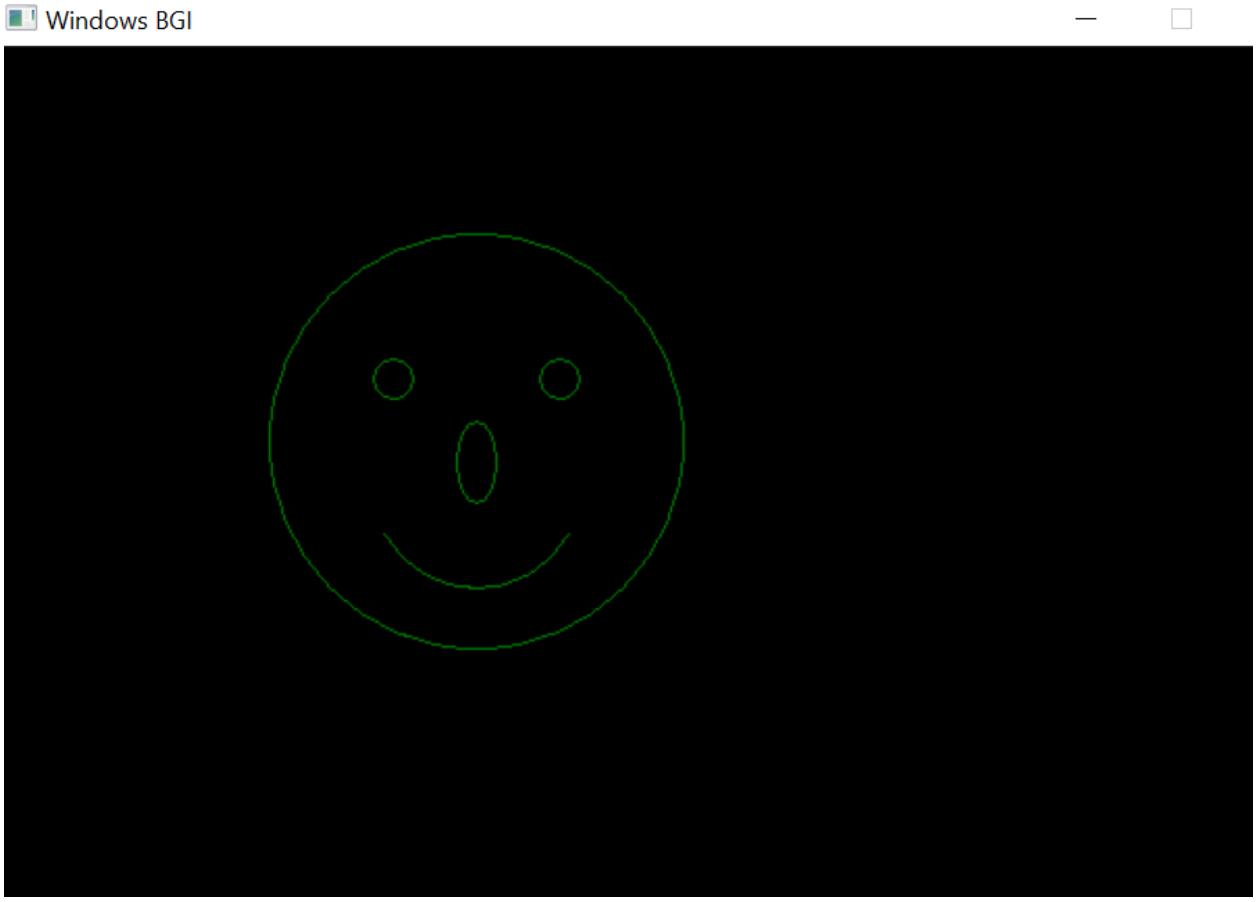


Name of Lab 4: Draw smiling face.
Source Code:

```
/*C graphics program to draw a face.*/
#include <graphics.h>
#include <conio.h>
main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");
// x1, y1 , x2, y2

    setcolor(GREEN);
    circle(230,190,100);
//left eye
    circle(190,160,10);
//right eye
    circle(270,160,10);
// nose
    ellipse(230,200,0,360,10,20 );
    arc(230,210,210,330,51);
//     line(95,30,95,310);
//arc(98,100 ,270,90,70);
//arc(98,240 ,270,90,70);
    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:

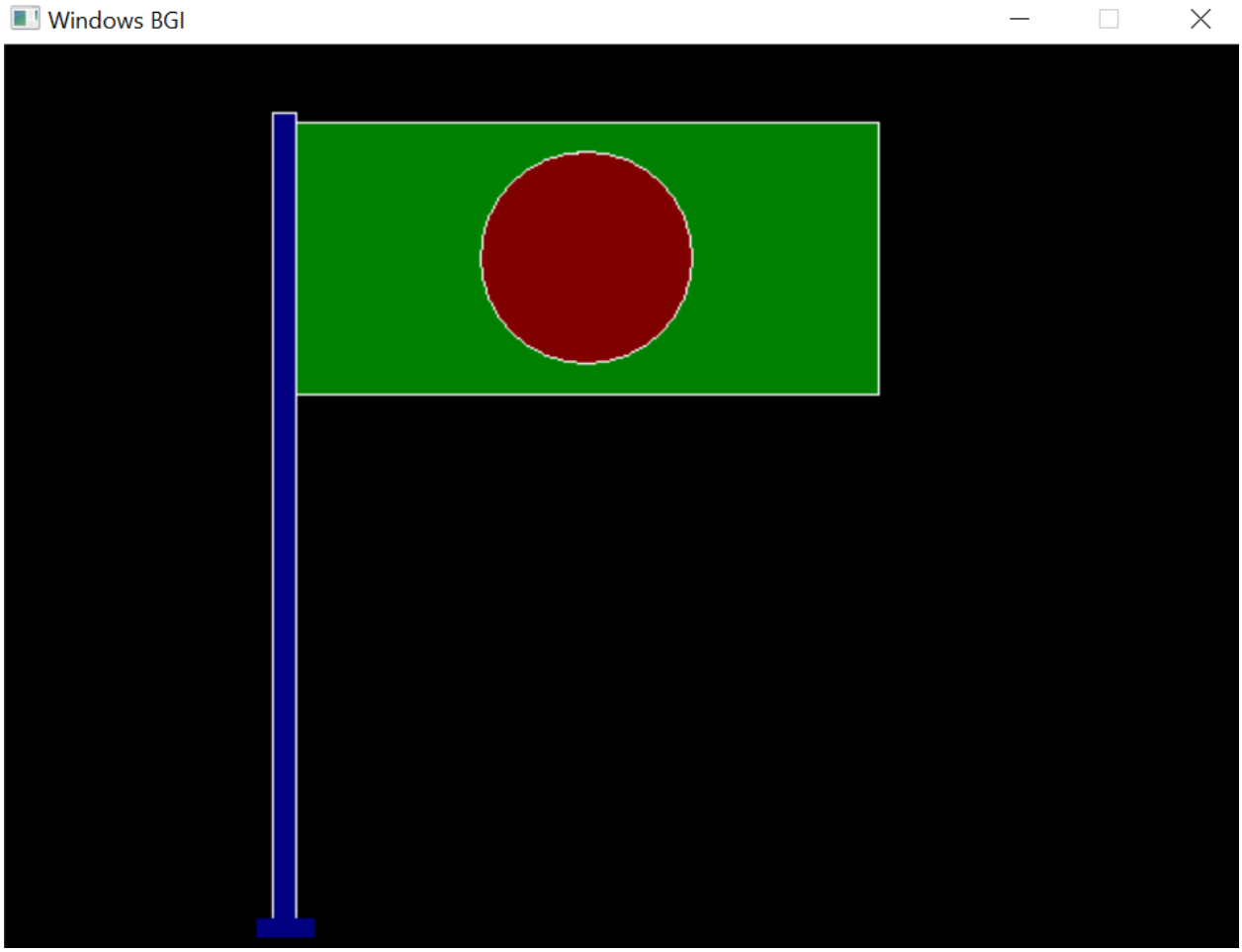


Name of Lab 5: Draw Bangladeshi Flag.
Source Code:

```
/*C graphics program to draw a line.*/
#include <graphics.h>
#include <conio.h>
#include"math.h"

main()
{
    int gd = DETECT, gm=0;

    //init graphics
    initgraph(&gd, &gm, (char*) "");

    setbkcolor(YELLOW);

    setcolor(WHITE);
    rectangle(150,40,450,180);
    setfillstyle(1,GREEN);

    floodfill(160,50,WHITE);
    setcolor(WHITE);

//  for flag bar
    rectangle(138,35,150,450);
    setfillstyle(1,BLUE);
    floodfill(140,40,WHITE);
    setcolor(WHITE);
    bar(130,450,160,460);
    setcolor(WHITE);
// center circle
    circle(300,110,55);
    setfillstyle(1,RED);
    floodfill(320,120,WHITE);
    setcolor(RED);
    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:



Name of Lab 6: Draw Shahid Minar.
Source Code:

```
/*C graphics program to draw a Sohid minar.*/
#include <graphics.h>
#include <conio.h>
#define sf SOLID_FILL

main()
{
    int gd = DETECT, gm;

    //init graphics
    initgraph(&gd, &gm, (char*) "");

    initwindow(1000,680);

    int page = 0;
    setcolor(WHITE);
    setfillstyle(SOLID_FILL,2);
    rectangle(600,450,950,460);
    floodfill(605,455,WHITE);
    rectangle(590,460,960,470);
    floodfill(595,465,WHITE);
    rectangle(575,470,970,480);
    floodfill(585,475,WHITE);

//1st minar

    rectangle(610,350,645,450);
    setfillstyle(SOLID_FILL,WHITE);
    rectangle(620,360,635,450);
    floodfill(620,353,WHITE);

//2nd

    rectangle(675,325,715,450);
    setfillstyle(SOLID_FILL,WHITE);
    rectangle(685,335,705,450);
```

```
    floodfill(680,327,WHITE);
//3rd
    rectangle(740, 300, 750,450);
    setfillstyle (SOLID_FILL, WHITE);
    floodfill (745,307, WHITE);
    setfillstyle(SOLID_FILL, WHITE);
    rectangle(770,300,780,450);
    floodfill(775,307,WHITE);
    setfillstyle(SOLID_FILL, WHITE);
    rectangle(800, 300,810,450);
    floodfill(805,307,WHITE);
    setcolor (WHITE);

//1st upper
    line (740,300,785,240);
    line (741,300,785,241);
    line (742,300,785,242);
    line (743,300,785,243);
    line (744,300,785,244);
    line (745,300,785,245);
    line (746,300,785,246);
    line (747,300,785,247);
    line (748,300,785,248);
    line (749,300,785,249);
    line (750,300,785,250);
    line (751,300,785,251);


    //3rd side

    line (810,300,855,240);
    line(800,300,835,253);
    line (800,300,845,240);
    line (801,300,846, 240);
    line (802,300,847, 240) ;
    line (803,300,848, 240);
    line (804, 300,849, 240);
    line (805,300, 850,240);
    line (806,300,851,240);
```

```
    line (807,300,852,240);
    line (808,300,853,240);
    line (809,300,854,240);
    line (810, 300,855,240);

//2nd side
    line (770,300,805,253);
    line (771,300,806,253);
    line (772,300,807,253);
    line (773,300,808,253);
    line (774,300,809,253);
    line (775,300,810,253);
    line (776,300,811,253);
    line (777,300,812,253);
    line (778,300,813,253);


//upper side all 1st

    line (785,240,855,240);
    line (786,241,845,241);
    line (786,242,846,242);
    line (786,243,847,243);
    line (786,244,848,244);
    line (786,245,849,245);
    line (786,246,850,246);
    line (786,247,851,247);

    line (786,247,850,247);
    line (786,248,849,248);
    line (786,249,848,249);
    line (786,250,847,250);
    line (786,251,846,251);
    line (786,252,845,252);

    //joint size
    line(785,253,805,253);
    line(815,253,835,253);
```

```
    //circle
    setcolor(RED);
    setfillstyle(SOLID_FILL,RED);
    circle(775,375,50);
    floodfill(775,375,RED);
    //4th minar

    setcolor(WHITE);
    rectangle(835,325,875,450);
    setfillstyle(sf,WHITE);
    rectangle(845,335,865,450);
    floodfill(845,327,WHITE);
//5th minar

    setcolor(WHITE);
    rectangle(900,350,940,450);
    setfillstyle(sf,WHITE);
    rectangle(910,360,930,450);
    floodfill(910,353,WHITE);


    getch();
    closegraph();
    return 0;
}
```

Result:
Input:

Output:

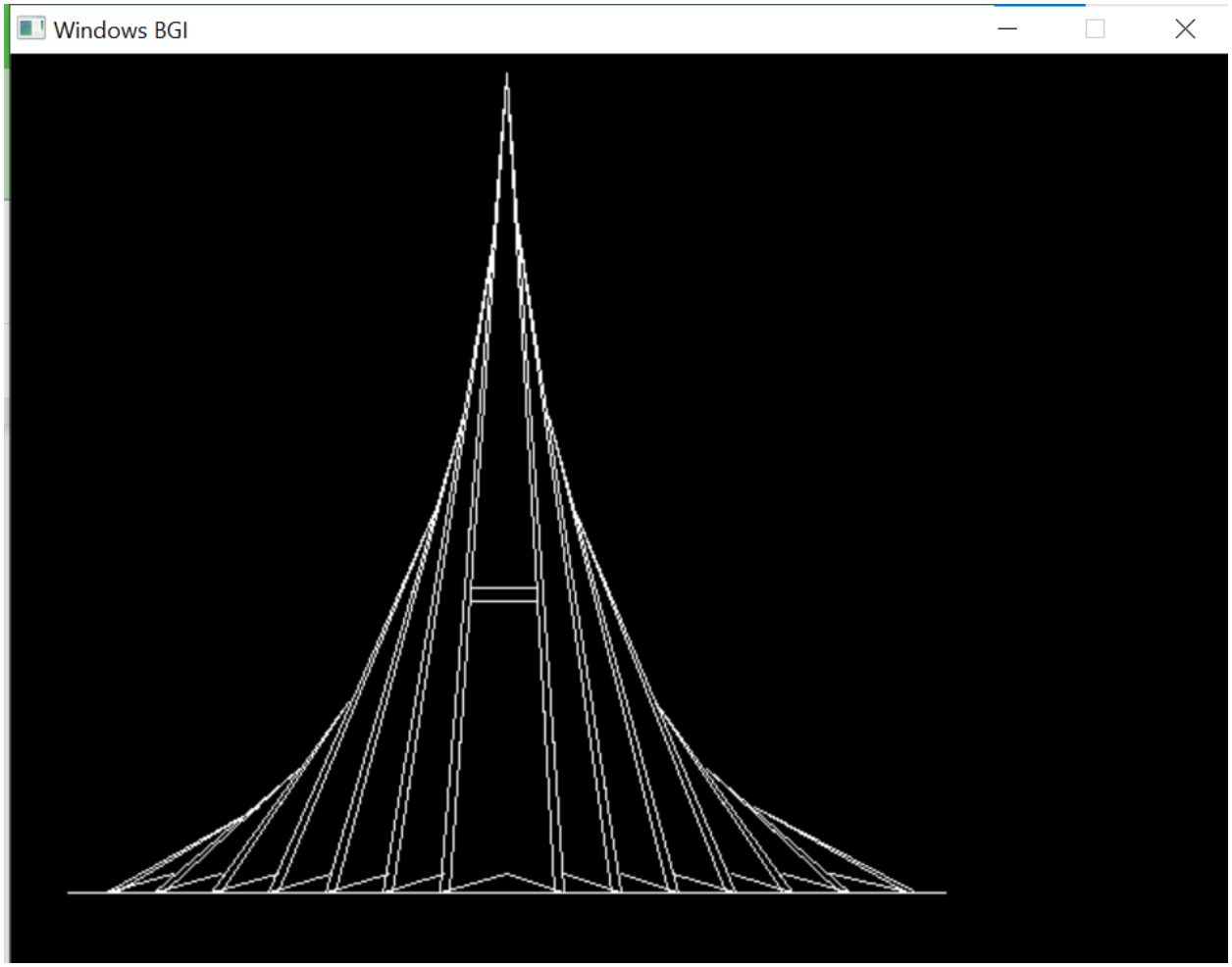
Name of Lab 7: Draw Sriti Shoudho.
Source Code:

```
#include <graphics.h>
#define sf SOLID_FILL
int main()
{

      int gd = DETECT, gm;
      initgraph(&gd, &gm, "");

      line(30,440,490,440);
      line(260, 10, 230, 440);
      line(260, 10, 225, 440);
      line(260, 10, 290, 440);
      line(260, 10, 285, 440);

      line(255, 85, 200, 440);
      line(255, 85, 195, 440);
      line(265, 85, 320, 440);
      line(265, 85, 315, 440);

    line(237, 190, 170, 440);
    line(237, 190, 165, 440);
    line(282, 190, 350, 440);
    line(282, 190, 345, 440);

    line(222, 240, 140, 440);
    line(222, 240, 135, 440);
    line(296, 240, 380, 440);
    line(296, 240, 375, 440);

    line(177, 340, 110, 440);
    line(177, 340, 105, 440);
    line(338, 340, 410, 440);
    line(338, 340, 405, 440);

    line(151, 375, 80, 440);
    line(151, 375, 75, 440);
```

```
    line(365, 375, 440, 440);
    line(365, 375, 435, 440);

    line(130, 395, 50, 440);
    line(130, 395, 55, 440);
    line(390, 395, 470, 440);
    line(390, 395, 475, 440);

    line(50, 440, 85, 430);
    line(75, 440, 110, 430);
    line(105, 440, 140, 430);
    line(135, 440, 168, 430);
    line(165, 440, 198, 430);
    line(195, 440, 227, 430);
    line(225, 440, 260, 430);
    line(290, 440, 260, 430);
    line(320, 440, 290, 430);
    line(350, 440, 320, 430);
    line(380, 440, 347, 430);
    line(410, 440, 378, 430);
    line(440, 440, 405, 430);
    line(472, 440, 430, 430);

    line(242, 280, 275, 280);
    line(242, 287, 275, 287);

    setcolor(WHITE);
     getch();
     closegraph();
}
```

Result:
Input:

Output:


Windows BGI


Thank
You