

## **“ROTATING FAN”**

### **1.0 BRIEF DESCRIPTION:**

Rotating fan is a project developed by using C programming language. The aim of the project is to create a rotating fan using tools and methodologies of computer graphics. In this program we can control the speed of fan by changing the input between 0 to 3.

### **2.0 Aim of the Micro-Project:**

This project aims at:

1. Describing the project using C code and output
2. To create a rotating fan and to control the speed of fan by giving the input between 0 to 3 in the program
3. To get knowledge and to handle computer graphics language.

### **3.0 COURSE OUTCOMES INTEGRATED:**

#### **PROGRAM CODE:**

```
#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<math.h>
#include<string.h>
#define PI 3.14
char speed[4];
int theta=0,change=1,temp=0,ch;
float x,y,r=100;
void main()
{
int gd=DETECT,gm;
initgraph(&gd,&gm,"C:/TURBOC3/BGI");
strcpy(speed,"on 1");
outtextxy(200,20,"Working Fan");
outtextxy(150,50,"Use number 0 1 2 3 to change fan speed");
outtextxy(475,375,"Fan speed");
fan:
do
{
cleardevice();
outtextxy(200,20,"*****WORKING FAN*****");
```

```

outtextxy(150,50,"Use number 0 1 2 3 to change fan speed");
outtextxy(475,375,"Fan speed");
if (kbhit())
{
ch=getch();
if (ch=='0')
{
rectangle(495,395,535,410);
floodfill(515,405,15);
temp=1;
}
if(ch=='1')
{
strcpy(speed,"on 1");
change=1;
}
else if(ch=='2')
{
strcpy(speed,"on 2");
change=3;
}
else if(ch=='3')
{
strcpy(speed,"on 3");
change=18;
}
}
outtextxy(500,400,speed);
circle(320,240,(r/12));
circle(320,240,(r/6));
circle(320,240,(r/4));
x=r*(cos((PI*theta)/180));
y=r*sin((PI*theta)/180);
line(320+(x/4),240+(y/4),320+(1.6*x),230+(1.6*y));
line(320+(x/4),240+(y/4),320+(1.6*x),250+(1.6*y));
line(320+(1.6*x),230+(1.6*y),320+(1.6*x),250+(1.6*y));
x=r*cos((PI*(theta+120))/180);
y=r*sin((PI*(theta+120))/180);
line(320+(x/4),240+(y/4),320+(1.6*x),230+(1.6*y));
line(320+(x/4),240+(y/4),320+(1.6*x),250+(1.6*y));
line(320+(1.6*x),230+(1.6*y),320+(1.6*x),250+(1.6*y));
x=r*cos((PI*(theta+240))/180);
y=r*sin((PI*(theta+240))/180);
line(320+(x/4),240+(y/4),320+(1.6*x),230+(1.6*y));
line(320+(x/4),240+(y/4),320+(1.6*x),250+(1.6*y));
line(320+(1.6*x),230+(1.6*y),320+(1.6*x),250+(1.6*y));

```

```

if(temp!=1)delay(36/change);
else
{
ch=getch();
if(ch=='\r')exit(0);
if(ch=='o')temp=1;
if(ch=='1')
{
strcpy(speed,"on 1");
temp=0;
change=1;
}
else if(ch=='2')
{
strcpy(speed,"on 2");
temp=0;
change=3;
}
else if(ch=='3')
{
strcpy(speed,"on 3");
temp=0;
change=18;
}
else
{
strcpy(speed,"off!");
temp=1;
}
}
if(theta==360)theta=0;
theta++;
}
while(temp==0);
goto fan;
}

```

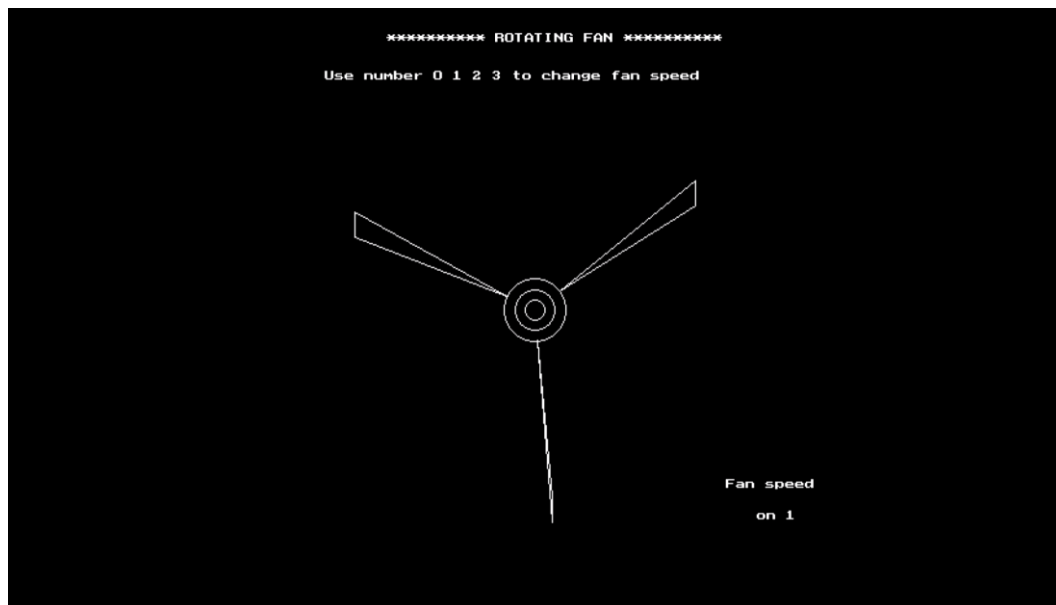
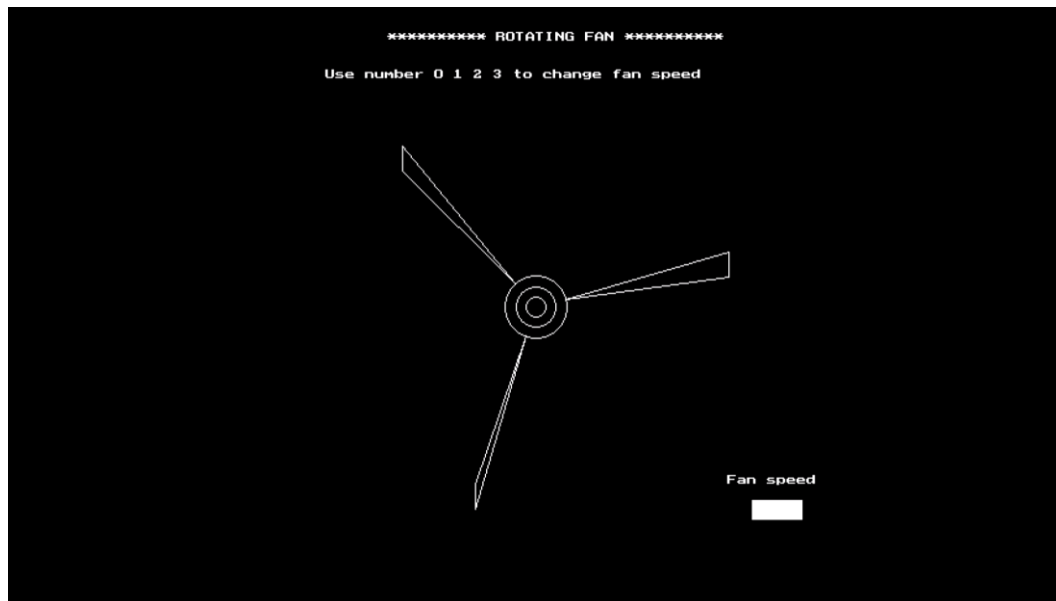
#### **4.0 ACTUAL PROCEDURE FOLLOWED:**

1. Project estimation.
2. Project selection.
3. Project planning.
4. Coding.
5. Testing.

#### **5.0 ACTUAL RESOURCES USED:**

S.NO	Name of resources/material	Specifications	Qty	Remarks
1.	Turbo C++	Version 3.2	-	
2.	Dos Box	Version 7	-	

## 6.0 OUTPUT OF MICROPROJECT:



## 7.0 SKILLS DEVELOPED OUT OF THIS MICRO-PROJECT:

1. To develop rotating fan project using computer graphics.
2. To change the speed of fan using C.
3. To draw the fan using different C functions.