

Title: Tree representation using Graphics.

Software used:

Turbo C++

Graphics Function used:

Built-in Functions:

- 1.setcolor();
- 2.circle(x,y,colour_number);
- 3.settextstyle(font type,direction,font size);
- 4.outtextxy(x,y,string_name);
- 5.delay();

User-defined Function:

- 1.tree(x,y,length,a,b);

Program Code:

```
#include<conio.h>
```

```
#include<stdlib.h>
```

```
#include<math.h>
```

```
#include<graphics.h>
```

```
#include<dos.h>
```

```
void tree(float x,float y,float len,float a,float b)
```

```
{
```

```
    if(len<20)
```

```
    {
```

```
        delay(50);
```

```
        setcolor(13);
```

```
        circle(x,y,5);
```

```
        setcolor(5);
```

```
        circle(x,y,6);
```

```
    return;
```

```
}
```

```
float x1,y1;
```

```
settextstyle(3,0,1);
```

```
setcolor(13);
```

```
outtextxy(150,5,"Computer Graphics MPR:TREE");
```

```
setcolor(10);
```

```
x1=x+len*cos(3.1428*a/180);
```

```
y1=y-len*sin(3.1428*a/180);
```

```
line(x,y,x1,y1);
```

```
tree(x1,y1,len*0.75,a-b,b);
```

```
tree(x1,y1,len*0.75,a-b,-b);
```

```
}
```

```
void main()
```

```
{
```

```
int gd=0,gm,i,rd;
```

```
float x=320,y=550,t=140;
```

```
clrscr();
```

```
initgraph(&gd,&gm,"C://TurboC3//BGI");
```

```
for(i=0;i<=3;i++)  
{  
    tree(x+i,y,t,90,30);  
    tree(x+i,y,t,90,-30);  
}  
getch();  
closegraph();  
}
```

OUTPUT:

