# functions of graphics.h

C graphics using graphics.h functions or WinBGIM (Windows 7) can be used to draw different shapes, display text in different fonts, change colors and many more. Using functions of graphics.h in turbo c compiler you can make graphics programs, animations, projects and games. You can draw circles, lines, rectangles, bars and many other geometrical figures. You can change their colors using the available functions and fill them. Following is a list of functions of graphics.h header file. Every function is discussed with the arguments it needs, its description, possible errors while using that function and a sample c graphics program with its output.

## C graphics

- Functions
- Programs
- Examples
- Window 7

## C graphics functions

- arc
- bar
- bar3d
- circle
- cleardevice
- closegraph
- drawpoly
- ellipse
- fillellipse
- fillpoly
- floodfill
- getarccords
- getbkcolor
- getcolor
- getdrivername
- getimage
- getmaxcolor
- getmaxx
- getmaxy
- getpixel
- getx
- gety
- graphdefaults
- grapherrormsg
- imagesize
- line
- lineto
- linerel
- moveto
- moverel
- outtext
- outtextxy
- pieslice
- putimage
- putpixel
- rectangle

- sector
- setbkcolor
- setcolor
- setfillstyle
- setlinestyle
- settextstyle
- setviewport
- textheight
- textwidth

## C graphics programs

- Draw shapes
- Bar chart
- Pie chart
- 3d bar chart
- Smiling face animation
- captcha
- Circles in circles
- Countdown
- Paint program in c
- Press me button game
- Web browser program
- Traffic Light Simulation
- Mouse pointer restricted in circle

## C graphics examples

1. Drawing concentric circles

```c
#include <graphics.h>

int main()
{
   int gd = DETECT, gm;
   int x = 320, y = 240, radius;

   initgraph(&gd, &gm, "C:\\TC\\BGI");

   for ( radius = 25; radius <= 125 ; radius = radius + 20)
     circle(x, y, radius);

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

2. C graphics program moving car

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

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

   initgraph(&gd,&gm,"C:\\TC\\BGI");

   settextstyle(DEFAULT_FONT,HORIZ_DIR,2);
   outtextxy(25,240,"Press any key to view the moving car");

   getch();

   for( i = 0 ; i <= 420 ; i = i + 10, j++ )
   {
      rectangle(50+i,275,150+i,400);
      rectangle(150+i,350,200+i,400);
      circle(75+i,410,10);
      circle(175+i,410,10);
      setcolor(j);
      delay(100);

      if( i == 420 )
         break;
      if ( j == 15 )
         j = 2;
```

```
        cleardevice(); // clear screen
    }

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

## Graphics in windows 7 or vista

Most of the functions are two dimensional except bar3d which draws a 3d bar, you can also implement these functions using already existing algorithms. You can also use these functions in C++ programs. You can use these functions for developing programs in Windows 7 and Vista using Dev C++ compiler. For that you need to download an additional package WinBGIm, download WinBGIm. Now open Dev C++ compiler go to tools->Package Manager, use install button and then browse the package location. Now create new project and select WinBGIm. This library also offers many functions which can be used for image manipulation, you can open image files, create bitmaps and print images, RGB colors and mouse handling.