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1  //SHREYAS SAWANT D7A 55
2  //Presenting Simple Animation of a ball travelling
3
4  #include <graphics.h>
5  #include <stdlib.h>
6
7  int i=0; //flag for x axis paths
8  int start=0; //start coordinate
9  float k=0; //flag for y axis slopes
10 int j=0; //flag for the plunger
11 int l=0; //counter for if else conditions
12 int t=0; //flag for moving the ball
13 int exiting=0; //exiting loop
14
15 void plunger()
16 {
17     if(480+j>400)
18         j--;
19
20     line(10,480+j,30,480+j);
21     line(10,480+j,10,490+j);
22     line(30,480+j,30,490+j);
23     line(10,490+j,17,490+j);
24     line(23,490+j,30,490+j);
25     line(17,490+j,17,520+j);
26     line(23,490+j,23,520+j);
27     line(17,520+j,23,520+j);
28
29     delay(10);
30
31 }
32
33 void scene()
34 {
35     if(l<220)
36     {
37         circle(20,240,10); //Start Path
38     }
39     else if(l>=220&&l<370)
40     {
41         circle(20,246-k,10); //First Slope
42         k++;
43     }
44     else if(l>=370&&l<640)
45     { circle(20,90,10); k=0; } //Upper Path
46     else if(l>=640&&l<790)
47     { circle(20,100+k,10); k+=1.333; } //Second Slope
48     else if(l>=790&&l<840)
49     { circle(20,290,10); k=0; } //Down Path
50     else if(l>=840&&l<865)
51     { circle(20,290+k,10); k+=4; } //Pit Fall
52     else if(480+j==400&&390+k>55)
53     {
54         plunger();
55         circle(20,390+k,10); k-=6; //Upper Push and Plunger static
56     }
57     else if(390+k<55 && 55+t<140)
58     {
59         plunger(); //Rebound
60         circle(20+t,55+t,10); t+=3;
61     }
62     else if(55+t>=140&&20+t<650)
63     {
64         plunger(); //Speeding on the upper path
65         circle(20+t,140,10); t+=4;
66     }
67     else if(20+t>644)
68     {
69         exiting=1; //Stopping the loop
70     }
71
72     else
73     {
74         k=0; circle(20,390,10); //Static Ball in Pit and Plunger Push
75         plunger();
76     }
77
78     if(i<840)
79     {
80         line(start,250,250-i,250); //Start Path
81         line(250-i,250,400-i,100); //First Slope
82         line(400-i,100,650-i,100); //Upper Path after first slope
83         line(650-i,100,800-i,300); //Second Slope
84         line(800-i,300,850-i,300); i++; //Down Path after second slope
85     }
86
87     else

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85         line(840-i,300,850-i,300); //Static down path
86
87         //Pit Creation
88         line(850-i,300,850-i,400);
89         line(850-i,400,870-i,400);
90         line(870-i,400,870-i,150);
91
92         //Top Path after Pit
93         line(870-i,150,1540-i,150);
94
95         //Upper Obstacle
96         line(840-i,0,840-i,70);
97         line(840-i,70,870-i,0);
98
99         l++;
100
101         delay(10);
102
103     }
104
105     int main()
106     {
107         int gd=DETECT, gm;
108         initgraph(&gd, &gm, " ");
109         int page=0;
110         while(i<=1500)
111         {
112             if(exiting ==0)
113             {
114                 setactivepage(page);
115                 setvisualpage(1-page);
116                 cleardevice();
117                 scene();
118
119                 page=1-page;
120             }
121             if(exiting==1)
122             break;
123
124         }
125         closegraph();
126         initgraph(&gd, &gm, " ");
127         outtextxy(100,210,"THANKS FOR WATCHING THE BALL MARATHON");
128         getch();
129

```





