#include<stdio.h>

#include<conio.h>

#include<dos.h>

#include<graphics.h>

#include<string.h>

microprocessor();

struct mp

{

char mn[21], op[3], remark[100], add[5];

}a[20];

int main()

{

int gd=DETECT,gm;

int i,test,x=5,y=20,check=0,h,j,z;

char add1[3],add2[3], ans[10];

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");

clrscr();

cleardevice();

printf("Enter the number of addresses being used\n");

scanf("%d",&test);

clrscr();

cleardevice();

outtextxy(400,400,"USE \_ INSTEAD OF SPACEBAR");

for(i=0;i<test;i++)

{

printf("Address:");

scanf("%s",&a[i].add);

printf("Mnemonic:");

scanf("%s",&a[i].mn);

printf("Code:");

scanf("%s",&a[i].op);

printf("Remarks:");

scanf("%s",&a[i].remark);

printf("\n\n");

}

clrscr();

cleardevice();

printf("Address\t Mnemonic Code\t Remarks\n");

for(i=0;i<test;i++)

{

x=5;

outtextxy(x,y,a[i].add);

x=x+70;

outtextxy(x,y,a[i].mn);

x=x+130;

outtextxy(x,y,a[i].op);

x=x+90;

outtextxy(x,y,a[i].remark);

y=y+30;

}

getch();

clrscr();

cleardevice();

for(i=0;i<test;i++)

{

if(check>0)

{

check--;

continue;

}

if(strncmp(a[i].op,"3A",2)==0)

{

printf("Address: %s%s \nVALUE: ",a[i+2].op,a[1].op);

scanf("%d",&h);

check=2;

continue;

}

if(strncmp(a[i].mn,"MOV",3)==0)

{

j=h;

continue;

}

if(strncmp(a[i].mn,"ADD",3)==0)

{

z=h+j;

continue;

}

if(strncmp(a[i].mn,"SUB",3)==0)

{

z=j-h;

}

if(strncmp(a[i].op,"32",2)==0)

{

printf("Address: %s%s\n\t",a[i+2].op,a[i+1].op);

printf("ANS: %d",z);

strcpy(add1,a[i+2].op);

strcpy(add2,a[i+1].op);

check=2;

continue;

}

}

getch();

microprocessor();

setcolor(WHITE);

sprintf(ans,"%d",z);

outtextxy(470,265,add1);

outtextxy(485,265,add2);

outtextxy(540,265,ans);

getch();

cleardevice();

return 0;

}

microprocessor()

{

char a;

printf("Press any key to switch on Dynalog 8085 Microprocessor\n");

scanf("%c",&a);

cleardevice();

rectangle(90,40,200,70);

outtextxy(95,45,".............");

outtextxy(95,55,".............");

rectangle(220,40,330,70);

outtextxy(225,45,".............");

outtextxy(225,55,".............");

rectangle(350,40,460,70);

outtextxy(355,45,".............");

outtextxy(355,55,".............");

rectangle(480,40,590,70);

outtextxy(485,45,".............");

outtextxy(485,55,".............");

rectangle(90,90,140,250);

rectangle(220,90,270,250);

rectangle(280,90,330,250);

rectangle(350,90,400,250);

rectangle(410,90,460,250);

outtextxy(93,90,". . . . . . . . . .");

outtextxy(93,98,". . . . . . . . . .");

outtextxy(93,106,". . . . . . . . . .");

outtextxy(93,114,". . . . . . . . . .");

outtextxy(93,122,". . . . . . . . . .");

outtextxy(93,130,". . . . . . . . . .");

outtextxy(93,138,". . . . . . . . . .");

outtextxy(93,146,". . . . . . . . . .");

outtextxy(93,154,". . . . . . . . . .");

outtextxy(93,162,". . . . . . . . . .");

outtextxy(93,170,". . . . . . . . . .");

outtextxy(93,178,". . . . . . . . . .");

outtextxy(93,186,". . . . . . . . . .");

outtextxy(93,194,". . . . . . . . . .");

outtextxy(93,202,". . . . . . . . . .");

outtextxy(93,210,". . . . . . . . . .");

outtextxy(93,218,". . . . . . . . . .");

outtextxy(93,226,". . . . . . . . . .");

outtextxy(93,234,". . . . . . . . . .");

outtextxy(93,242,". . . . . . . . . .");

rectangle(480,90,510,150);

rectangle(520,90,550,150);

rectangle(600,80,610,140);

outtextxy(603,80,".");

outtextxy(603,90,".");

outtextxy(603,100,".");

outtextxy(603,110,".");

outtextxy(603,120,".");

outtextxy(603,130,".");

outtextxy(485,93,". . . .");

outtextxy(485,100,". . . .");

outtextxy(485,107,". . . .");

outtextxy(485,114,". . . .");

outtextxy(485,121,". . . .");

outtextxy(485,128,". . . .");

outtextxy(485,135,". . . .");

outtextxy(485,142,". . . .");

rectangle(480,160,515,250);

rectangle(520,160,555,250);

outtextxy(482,160,". . . .");

outtextxy(482,169,". . . .");

outtextxy(482,178,". . . .");

outtextxy(482,186,". . . .");

outtextxy(482,195,". . . .");

outtextxy(482,204,". . . .");

outtextxy(482,213,". . . .");

outtextxy(482,222,". . . .");

outtextxy(482,231,". . . .");

outtextxy(482,240,". . . .");

setcolor(WHITE); //LED Display

rectangle(430,260,620,280);

setfillstyle(SOLID\_FILL,RED);

floodfill(450,270,WHITE);

setcolor(WHITE);

rectangle(430,285,470,315); //8085 Keypad

outtextxy(447,292,"C");

outtextxy(445,302,"U1");

rectangle(480,285,520,315);

outtextxy(497,292,"D");

outtextxy(495,302,"U2");

rectangle(530,285,570,315);

outtextxy(547,292,"E");

outtextxy(545,302,"U3");

rectangle(580,285,620,315);

outtextxy(598,292,"F");

outtextxy(594,302,"U4");

rectangle(430,320,470,350);

outtextxy(447,327,"8");

outtextxy(435,337,"GO/H");

rectangle(480,320,520,350);

outtextxy(497,327,"9");

outtextxy(497,337,"L");

rectangle(530,320,570,350);

outtextxy(547,327,"A");

outtextxy(535,337,"LOAD");

rectangle(580,320,620,350);

outtextxy(597,327,"B");

outtextxy(585,337,"SAVE");

rectangle(430,355,470,385);

outtextxy(447,362,"4");

outtextxy(440,372,"SPH");

rectangle(480,355,520,385);

outtextxy(497,362,"5");

outtextxy(490,372,"SPL");

rectangle(530,355,570,385);

outtextxy(547,362,"6");

outtextxy(540,372,"PCH");

rectangle(580,355,620,385);

outtextxy(598,362,"7");

outtextxy(590,372,"PCL");

rectangle(430,390,470,420);

outtextxy(447,397,"0");

outtextxy(440,407,"SET");

rectangle(480,390,520,420);

outtextxy(497,397,"1");

outtextxy(485,407,"CODE");

rectangle(530,390,570,420);

outtextxy(547,397,"2");

outtextxy(535,407,"STEP");

rectangle(580,390,620,420);

outtextxy(597,397,"3");

outtextxy(582,407,"RE8/1");

rectangle(388,285,422,315);

outtextxy(395,295,"V.I");

rectangle(388,320,422,350);

outtextxy(395,330,"DCR");

rectangle(388,355,422,385);

outtextxy(390,365,"EXEC");

rectangle(388,390,422,420);

outtextxy(393,400,"INR");

rectangle(350,285,380,315);

outtextxy(355,295,"RES");

rectangle(330,370,370,420);

setfillstyle(SOLID\_FILL,3);

floodfill(335,380,WHITE);

setcolor(2);

line(330,391,370,391);

line(330,392,370,392);

line(330,393,370,393);

line(330,394,370,394);

setcolor(2);

line(330,401,370,401);

line(330,402,370,402);

line(330,403,370,403);

line(330,404,370,404);

setcolor(BLACK);

line(332,401,368,401);

line(332,405,368,405);

line(332,390,368,390);

line(332,395,368,395);

setcolor(WHITE);

rectangle(330,370,370,420);

setcolor(WHITE);

circle(360,350,5);

circle(340,350,10);

circle(610,200,10);

circle(610,240,10);

circle(610,165,5);

circle(580,210,8);

circle(580,235,8);

setfillstyle(SOLID\_FILL,WHITE);

floodfill(362,351,WHITE);

floodfill(341,351,WHITE);

floodfill(611,201,WHITE);

floodfill(611,166,WHITE);

floodfill(611,241,WHITE);

floodfill(581,211,WHITE);

floodfill(581,236,WHITE);

setcolor(BROWN);

circle(610,200,5);

circle(610,240,5);

setfillstyle(SOLID\_FILL,BROWN);

floodfill(611,243,BROWN);

floodfill(611,203,BROWN);

setcolor(RED);

circle(580,210,4);

circle(580,235,4);

setfillstyle(SOLID\_FILL,RED);

floodfill(581,237,RED);

floodfill(581,212,RED);

setcolor(WHITE);

setfillstyle(SOLID\_FILL,YELLOW);

rectangle(560,100,565,140);

floodfill(561,101,WHITE);

rectangle(570,100,575,140);

floodfill(571,101,WHITE);

rectangle(580,100,585,140);

floodfill(581,101,WHITE);

setcolor(RED);

line(561,110,564,110);

line(561,111,564,111);

line(561,112,564,112);

line(571,110,574,110);

line(571,111,574,111);

line(571,112,574,112);

line(581,110,584,110);

line(581,111,584,111);

line(581,112,584,112);

setcolor(BLUE);

line(561,115,564,115);

line(561,116,564,116);

line(561,117,564,117);

line(571,115,574,115);

line(571,116,574,116);

line(571,117,574,117);

line(581,115,584,115);

line(581,116,584,116);

line(581,117,584,117);

setcolor(10);

line(561,120,564,120);

line(561,121,564,121);

line(561,122,564,122);

line(571,120,574,120);

line(571,121,574,121);

line(571,122,574,122);

line(581,120,584,120);

line(581,121,584,121);

line(581,122,584,122);

setcolor(BROWN);

line(561,125,564,125);

line(561,126,564,126);

line(561,127,564,127);

line(571,125,574,125);

line(571,126,574,126);

line(571,127,574,127);

line(581,125,584,125);

line(581,126,584,126);

line(581,127,584,127);

setcolor(WHITE);

rectangle(565,160,595,170);

rectangle(565,180,595,190);

setfillstyle(SOLID\_FILL,13);

floodfill(566,161,WHITE);

floodfill(566,181,WHITE);

setcolor(YELLOW);

line(570,161,570,169);

line(571,161,571,169);

line(572,161,572,169);

line(570,181,570,189);

line(571,181,571,189);

line(572,181,572,189);

setcolor(10);

line(575,161,575,169);

line(576,161,576,169);

line(577,161,577,169);

line(575,181,575,189);

line(576,181,576,189);

line(577,181,577,189);

setcolor(01);

line(580,161,580,169);

line(581,161,581,169);

line(582,161,582,169);

line(580,181,580,189);

line(581,181,581,189);

line(582,181,582,189);

setcolor(RED);

line(585,161,585,169);

line(586,161,586,169);

line(587,161,587,169);

line(585,181,585,189);

line(586,181,586,189);

line(587,181,587,189);

setcolor(WHITE);

rectangle(270,340,310,420);

rectangle(200,340,240,420);

rectangle(120,340,160,420);

rectangle(125,350,155,410);

setfillstyle(SOLID\_FILL,BROWN);

setcolor(WHITE);

floodfill(121,341,WHITE);

outtextxy(137,355,"D");

outtextxy(137,365,"Y");

outtextxy(137,375,"N");

outtextxy(137,385,"A");

outtextxy(134,398,"85");

setcolor(GREEN);

rectangle(127,352,153,408);

rectangle(210,345,230,380);

rectangle(210,384,230,415);

setfillstyle(SOLID\_FILL,GREEN);

floodfill(211,346,GREEN);

floodfill(211,387,GREEN);

setcolor(WHITE);

outtextxy(202,340,". . . .");

outtextxy(202,345,". . . .");

outtextxy(202,350,". . . .");

outtextxy(202,355,". . . .");

outtextxy(202,360,". . . .");

outtextxy(202,365,". . . .");

outtextxy(202,370,". . . .");

outtextxy(202,375,". . . .");

outtextxy(202,380,". . . .");

outtextxy(202,385,". . . .");

outtextxy(202,390,". . . .");

outtextxy(202,395,". . . .");

outtextxy(202,400,". . . .");

outtextxy(202,405,". . . .");

outtextxy(202,410,". . . .");

outtextxy(290,345,"H");

outtextxy(290,355,"Y");

outtextxy(290,365,"U");

outtextxy(290,375,"N");

outtextxy(290,385,"D");

outtextxy(290,395,"A");

outtextxy(290,405,"I");

setcolor(YELLOW);

outtextxy(435,100,"T");

outtextxy(435,120,"O");

outtextxy(435,140,"S");

outtextxy(435,160,"H");

outtextxy(435,180,"I");

outtextxy(435,200,"B");

outtextxy(435,220,"A");

setcolor(WHITE);

circle(70,80,10);

setfillstyle(SOLID\_FILL,6);

floodfill(71,81,WHITE);

rectangle(0,20,630,450);

rectangle(90,260,140,320);

outtextxy(92,260,". .");

outtextxy(92,265,". .");

outtextxy(92,270,". .");

outtextxy(92,275,". .");

outtextxy(92,280,". .");

outtextxy(92,285,". .");

outtextxy(92,290,". .");

outtextxy(92,295,". .");

outtextxy(92,300,". .");

outtextxy(92,305,". .");

outtextxy(92,310,". .");

rectangle(160,170,190,250);

outtextxy(161,170,". .");

outtextxy(161,180,". .");

outtextxy(161,190,". .");

outtextxy(161,200,". .");

outtextxy(161,210,". .");

outtextxy(161,220,". .");

outtextxy(161,230,". .");

outtextxy(161,240,". .");

rectangle(160,260,190,310);

rectangle(220,260,240,300);

rectangle(250,260,270,300);

rectangle(280,260,300,300);

rectangle(310,260,330,300);

outtextxy(161,260,". .");

outtextxy(161,266,". .");

outtextxy(161,272,". .");

outtextxy(161,278,". .");

outtextxy(161,284,". .");

outtextxy(161,290,". .");

outtextxy(161,296,". .");

outtextxy(161,302,". .");

outtextxy(224,260,"..");

outtextxy(224,265,"..");

outtextxy(224,270,"..");

outtextxy(224,275,"..");

outtextxy(224,280,"..");

outtextxy(224,285,"..");

outtextxy(224,290,"..");

outtextxy(253,260,"..");

outtextxy(253,266,"..");

outtextxy(253,272,"..");

outtextxy(253,278,"..");

outtextxy(253,284,"..");

outtextxy(253,290,"..");

outtextxy(283,260,"..");

outtextxy(283,266,"..");

outtextxy(283,272,"..");

outtextxy(283,278,"..");

outtextxy(283,284,"..");

outtextxy(283,290,"..");

outtextxy(313,260,"..");

outtextxy(313,266,"..");

outtextxy(313,272,"..");

outtextxy(313,278,"..");

outtextxy(313,284,"..");

outtextxy(313,290,"..");

setfillstyle(SOLID\_FILL,YELLOW);

rectangle(220,310,260,320);

floodfill(221,311,WHITE);

rectangle(280,310,320,320);

floodfill(281,311,WHITE);

rectangle(360,260,410,270);

floodfill(361,261,WHITE);

setcolor(RED);

line(227,311,227,319);

line(228,311,228,319);

line(229,311,229,319);

line(287,311,287,319);

line(288,311,288,319);

line(289,311,289,319);

line(370,261,370,269);

line(371,261,371,269);

line(372,261,372,269);

setcolor(GREEN);

line(232,311,232,319);

line(233,311,233,319);

line(234,311,234,319);

line(292,311,292,319);

line(293,311,293,319);

line(294,311,294,319);

line(375,261,375,269);

line(376,261,376,269);

line(377,261,377,269);

setcolor(BLUE);

line(237,311,237,319);

line(238,311,238,319);

line(239,311,239,319);

line(297,311,297,319);

line(298,311,298,319);

line(299,311,299,319);

line(380,261,380,269);

line(381,261,381,269);

line(382,261,382,269);

setcolor(6);

line(242,311,242,319);

line(243,311,243,319);

line(244,311,244,319);

line(302,311,302,319);

line(303,311,303,319);

line(304,311,304,319);

line(385,261,385,269);

line(386,261,386,269);

line(387,261,387,269);

setcolor(WHITE);

rectangle(160,90,200,130);

setfillstyle(SOLID\_FILL,-9);

floodfill(170,100,WHITE);

rectangle(160,145,200,155);

setfillstyle(SOLID\_FILL,YELLOW);

floodfill(161,150,WHITE);

setcolor(RED);

line(168,146,168,154);

line(169,146,169,154);

line(170,146,170,154);

setcolor(GREEN);

line(174,146,174,154);

line(175,146,175,154);

line(176,146,176,154);

setcolor(BLUE);

line(180,146,180,154);

line(181,146,181,154);

line(182,146,182,154);

setcolor(6);

line(186,146,186,154);

line(187,146,187,154);

line(188,146,188,154);

setcolor(WHITE);

rectangle(10,50,40,100);

rectangle(20,380,100,430);

setfillstyle(SOLID\_FILL,-9);

floodfill(50,400,WHITE);

floodfill(20,60,WHITE);

setcolor(BLACK);

outtextxy(35,400,"DYNA-85");

outtextxy(50,410,"V6.0");

setcolor(WHITE);

rectangle(10,120,40,170);

outtextxy(11,120,". .");

outtextxy(11,130,". .");

outtextxy(11,140,". .");

outtextxy(11,150,". .");

outtextxy(11,160,". .");

rectangle(10,200,40,360);

outtextxy(11,200,". .");

outtextxy(11,206,". .");

outtextxy(11,212,". .");

outtextxy(11,218,". .");

outtextxy(11,224,". .");

outtextxy(11,230,". .");

outtextxy(11,236,". .");

outtextxy(11,242,". .");

outtextxy(11,248,". .");

outtextxy(11,254,". .");

outtextxy(11,260,". .");

outtextxy(11,266,". .");

outtextxy(11,272,". .");

outtextxy(11,278,". .");

outtextxy(11,284,". .");

outtextxy(11,290,". .");

outtextxy(11,296,". .");

outtextxy(11,302,". .");

outtextxy(11,308,". .");

outtextxy(11,314,". .");

outtextxy(11,320,". .");

outtextxy(11,326,". .");

outtextxy(11,332,". .");

outtextxy(11,340,". .");

outtextxy(11,346,". .");

outtextxy(11,352,". .");

setfillstyle(SOLID\_FILL,YELLOW);

rectangle(50,130,80,140);

floodfill(51,131,WHITE);

rectangle(50,150,80,160);

floodfill(51,155,WHITE);

setcolor(RED);

line(55,131,55,139);

line(56,131,56,139);

line(57,131,57,139);

line(55,151,55,159);

line(56,151,56,159);

line(57,151,57,159);

setcolor(BLUE);

line(60,131,60,139);

line(61,131,61,139);

line(62,131,62,139);

line(60,151,60,159);

line(61,151,61,159);

line(62,151,62,159);

setcolor(GREEN);

line(65,131,65,139);

line(66,131,66,139);

line(67,131,67,139);

line(65,151,65,159);

line(66,151,66,159);

line(67,151,67,159);

setcolor(BROWN);

line(70,131,70,139);

line(71,131,71,139);

line(72,131,72,139);

line(70,151,70,159);

line(71,151,71,159);

line(72,151,72,159);

setcolor(WHITE);

rectangle(70,180,80,210);

setfillstyle(SOLID\_FILL,-9);

floodfill(71,190,WHITE);

setfillstyle(SOLID\_FILL,GREEN);

floodfill(35,35,WHITE);

return 0;

}

**OUTPUT:**



  



 