**Code และรูป ของโปรแกรมแสดง สูตรคูณ (แม่1 – แม่25 )**

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| //Untitied.cpp  #include <windows.h>  #include <tchar.h>  #include "resource.h"  // Global Variables:  HINSTANCE hInst; // current instance  TCHAR szTitle[]="Jirawat Kakeaw 58030146 [ Exam1]"; // The title bar text  TCHAR szWindowClass[]="WinApp"; // the class name  // Foward declarations of functions included in this code module:  ATOM MyRegisterClass(HINSTANCE hInstance);  BOOL InitInstance(HINSTANCE, int);  LRESULT CALLBACK WndProc(HWND, UINT, WPARAM, LPARAM);  int APIENTRY WinMain(HINSTANCE hInstance,  HINSTANCE hPrevInstance,  LPSTR lpCmdLine,  int nCmdShow)  {  // TODO: Place code here.  MSG msg;  // Register Class  MyRegisterClass(hInstance);  // Perform application initialization:  if (!InitInstance (hInstance, nCmdShow))  {  return FALSE;  }  // Main message loop:  while (GetMessage(&msg, NULL, 0, 0))  {  TranslateMessage(&msg);  DispatchMessage(&msg);  }  return msg.wParam;  }  ATOM MyRegisterClass(HINSTANCE hInstance)  {  WNDCLASSEX wcex;  wcex.cbSize = sizeof(WNDCLASSEX);  wcex.style = CS\_HREDRAW | CS\_VREDRAW;  wcex.lpfnWndProc = (WNDPROC)WndProc;  wcex.cbClsExtra = 0;  wcex.cbWndExtra = 0;  wcex.hInstance = hInstance;  wcex.hIcon = LoadIcon (NULL, IDI\_APPLICATION);  wcex.hCursor = LoadCursor(NULL, IDC\_ARROW);  wcex.hbrBackground = (HBRUSH)(COLOR\_WINDOW+1);  // wcex.lpszMenuName = NULL;  wcex.lpszMenuName = MAKEINTRESOURCE(IDR\_MYMENU);  wcex.lpszClassName = szWindowClass;  wcex.hIconSm = LoadIcon (NULL, IDI\_APPLICATION);  // wcex.hIcon = LoadIcon(GetModuleHandle(NULL), MAKEINTRESOURCE(IDI\_MYICON));  // wcex.hIconSm = (HICON)LoadImage(GetModuleHandle(NULL), MAKEINTRESOURCE(IDI\_MYICON), IMAGE\_ICON, 16, 16, 0);  return RegisterClassEx(&wcex);  }  BOOL InitInstance(HINSTANCE hInstance, int nCmdShow)  {  HWND hWnd;  hInst = hInstance;  hWnd = CreateWindow(szWindowClass, szTitle, WS\_OVERLAPPEDWINDOW,  100, 200, 480, 480, NULL, NULL, hInstance, NULL);  if (!hWnd)  {  return FALSE;  }  ShowWindow(hWnd, nCmdShow);  UpdateWindow(hWnd);  return TRUE;  }  LRESULT CALLBACK WndProc(HWND hWnd, UINT message, WPARAM wParam, LPARAM lParam)  {  PAINTSTRUCT ps;  HDC hdc;  RECT rt;  char szHello[]="Multiplication table";    switch (message)  {  case WM\_PAINT:  hdc = BeginPaint(hWnd,&ps);    SelectObject(hdc,CreateSolidBrush(RGB(66,143,232)));  Ellipse(hdc,115,190,345,400);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  Rectangle(hdc, 100, 270,360, 400);    SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  SelectObject(hdc,CreateSolidBrush(RGB(66,143,232)));  Rectangle(hdc, 160, 280,225, 385);  Rectangle(hdc, 230, 280,298, 385);  Ellipse(hdc,150,190,310,350);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(66,143,232)));  SelectObject(hdc,CreateSolidBrush(RGB(66,143,232)));  Rectangle(hdc, 161, 300,297,349);  Rectangle(hdc, 290, 220,310, 240);  Rectangle(hdc, 153, 220,180, 240);  Rectangle(hdc, 170, 205,290, 220);  Rectangle(hdc, 165, 215,295, 225);  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  SelectObject(hdc,CreatePen(PS\_SOLID,2,RGB(0,0,0)));  Ellipse(hdc,227,360,305,392);  Ellipse(hdc,153,360,229,392);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  //thong  Ellipse(hdc,160,330,300,195); //wi tong  Ellipse(hdc,180,300,280,210); //wi tong  Rectangle(hdc, 181, 260,279, 261);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  Rectangle(hdc, 180, 221,282, 260);    LineTo(hdc, 163, 110);  SelectObject(hdc,CreatePen(PS\_SOLID,2,RGB(0,0,0)));  Ellipse(hdc,105,260,155,305);  Ellipse(hdc,305,260,355,305);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));      //head    Ellipse(hdc,125,210,335,30); // big h  SelectObject(hdc,CreateSolidBrush(RGB(66,143,232)));  Ellipse(hdc,125,209,335,30); // big h  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  Ellipse(hdc,145,210,315,70); //small h  Ellipse(hdc,192,100,229,60); //ta  Ellipse(hdc,231,100,266,60); //ta  SelectObject(hdc,CreateSolidBrush(RGB(255,0,0)));  Ellipse(hdc,219,118,239,98); //jamug  SelectObject(hdc,CreateSolidBrush(RGB(255,0,0)));  Rectangle(hdc, 170, 195,289, 205); //pogkor  Ellipse(hdc,167,195,174,205); //jamug  Ellipse(hdc,285,195,292,205); //jamug  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,0,0)));  Ellipse(hdc,168,195,175,205); //jamug  Ellipse(hdc,284,195,291,205); //jamug  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  Rectangle(hdc, 198, 205,262, 260);//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  SelectObject(hdc,CreateSolidBrush(RGB(255,255,0)));  SelectObject(hdc,CreatePen(PS\_SOLID,2,RGB(0,0,0)));  Ellipse(hdc,215,190,245,220);//kading  Ellipse(hdc,213,197,247,205);  Rectangle(hdc, 230, 205,231,220);  SelectObject(hdc,CreateSolidBrush(RGB(0,0,0)));  Ellipse(hdc,225,206,235,214);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  SelectObject(hdc,CreateSolidBrush(RGB(0,0,0)));  Ellipse(hdc,207,85,220,70); // ta b r  Ellipse(hdc,238,85,250,70); // ta b R  SelectObject(hdc,CreateSolidBrush(RGB(255,255,255)));  Ellipse(hdc,170,145,290,170); // m  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  Ellipse(hdc,170,130,290,168); //w pagbon    SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  Rectangle(hdc, 229, 118,230, 170); //s jamug      //nuad  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 218, 120);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  LineTo(hdc, 215, 130);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 155, 130);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  LineTo(hdc, 217, 141);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 160, 147);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  LineTo(hdc, 241, 120);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 300, 110);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  LineTo(hdc, 240, 130);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 303, 130);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(255,255,255)));  LineTo(hdc, 240, 140);  SelectObject(hdc,CreatePen(PS\_SOLID,1,RGB(0,0,0)));  LineTo(hdc, 297, 143);    EndPaint(hWnd,&ps);  return 0;  case WM\_COMMAND:  switch(LOWORD(wParam))  {  case ID\_FILE\_1:  MessageBox(NULL,"1x1 = 1 \n1x2 = 2\n1x3 = 3\n1x4 = 4\n1x5 = 5\n1x6 = 6\n1x7 = 7\n1x8 = 8\n1x9 = 9\n1x10 = 10\n1x11 = 11\n1x12 = 12\n",  "1",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_2:  MessageBox(NULL,"2x1 = 2 \n2x2 = 4\n2x3 = 6\n2x4 = 8\n2x5 = 10\n2x6 = 12\n2x7 = 14\n2x8 = 16\n2x9 = 18\n2x10 = 20\n2x11 = 22\n2x12 = 24",  "2",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_3:  MessageBox(NULL,"3 x 1 = 3\n3 x 2 = 6\n3 x 3 = 9\n3 x 4 = 12\n3 x 5 = 15\n3 x 6 = 18\n3 x 7 = 21\n3 x 8 = 24\n3 x 9 = 27\n3 x 10 = 30\n3 x 11 = 33\n3 x 12 = 36",  "3",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_4:  MessageBox(NULL,"4 x 1 = 4\n4 x 2 = 8\n4 x 3 = 12\n4 x 4 = 16\n4 x 5 = 20\n4 x 6 = 24\n4 x 7 = 28\n4 x 8 = 32\n4 x 9 = 36\n4 x 10 = 40\n4 x 11 = 44\n4 x 12 = 48",  "4",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_5:  MessageBox(NULL,"5 x 1 = 5\n5 x 2 = 10\n5 x 3 = 15\n5 x 4 = 20\n5 x 5 = 25\n5 x 6 = 30\n5 x 7 = 35\n5 x 8 = 40\n5 x 9 = 45\n5 x 10 = 50\n5 x 11 = 55\n5 x 12 = 60",  "5",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_6:  MessageBox(NULL,"6 x 1 = 6\n6 x 2 = 12\n6 x 3 = 18\n6 x 4 = 24\n6 x 5 = 30\n6 x 6 = 36\n6 x 7 = 42\n6 x 8 = 48\n6 x 9 = 54\n6 x 10 = 60\n6 x 11 = 66\n6 x 12 = 72",  "6",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_7:  MessageBox(NULL,"7 x 1 = 7\n7 x 2 = 14\n7 x 3 = 21\n7 x 4 = 28\n7 x 5 = 35\n7 x 6 = 42\n7 x 7 = 49\n7 x 8 = 56\n7 x 9 = 63\n7 x 10 = 70\n7 x 11 = 77\n7 x 12 = 84",  "7",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_8:  MessageBox(NULL,"8 x 1 = 8\n8 x 2 = 16\n8 x 3 = 24\n8 x 4 = 32\n8 x 5 = 40\n8 x 6 = 48\n8 x 7 = 56\n8 x 8 = 64\n8 x 9 = 72\n8 x 10 = 80\n8 x 11 = 88\n8 x 12 = 96",  "8",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_9:  MessageBox(NULL,"9 x 1 = 9\n9 x 2 = 18\n9 x 3 = 27\n9 x 4 = 36\n9 x 5 = 45\n9 x 6 = 54\n9 x 7 = 63\n9 x 8 = 72\n9 x 9 = 81\n9 x 10 = 90\n9 x 11 = 99\n9 x 12 = 108",  "9",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_10:  MessageBox(NULL,"10 x 1 = 10\n10 x 2 = 20\n10 x 3 = 30\n10 x 4 = 40\n10 x 5 = 50\n10 x 6 = 60\n10 x 7 = 70\n10 x 8 = 80\n10 x 9 = 90\n10 x 10 = 100\n10 x 11 = 110\n10 x 12 = 120",  "10",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_11:  MessageBox(NULL,"11 x 1 = 11\n11 x 2 = 22\n11 x 3 = 33\n11 x 4 = 44\n11 x 5 = 55\n11 x 6 = 66\n11 x 7 = 77\n11 x 8 = 88\n11 x 9 = 99\n11 x 10 = 110\n11 x 11 = 121\n11 x 12 = 132",  "11",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_12:  MessageBox(NULL,"12 x 1 = 12\n12 x 2 = 24\n12 x 3 = 36\n12 x 4 = 48\n12 x 5 = 60\n12 x 6 = 72\n12 x 7 = 84\n12 x 8 = 96\n12 x 9 = 108\n12 x 10 = 120\n12 x 11 = 132\n12 x 12 = 144",  "12",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_13:  MessageBox(NULL,"13 x 1 = 13\n13 x 2 = 26\n13 x 3 = 39\n13 x 4 = 52\n13 x 5 = 65\n13 x 6 = 78\n13 x 7 = 91\n13 x 8 = 104\n13 x 9 = 117\n13 x 10 = 130\n13 x 11 = 143\n13 x 12 = 156",  "13",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_14:  MessageBox(NULL,"14 x 1 = 14\n14 x 2 = 28\n14 x 3 = 42\n14 x 4 = 56\n14 x 5 = 70\n14 x 6 = 84\n14 x 7 = 98\n14 x 8 = 112\n14 x 9 = 126\n14 x 10 = 140\n14 x 11 = 154\n14 x 12 = 168",  "14",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_15:  MessageBox(NULL,"15 x 1 = 15\n15 x 2 = 30\n15 x 3 = 45\n15 x 4 = 60\n15 x 5 = 75\n15 x 6 = 90\n15 x 7 = 105\n15 x 8 = 120\n15 x 9 = 135\n15 x 10 = 150\n15 x 11 = 165\n15 x 12 = 180",  "15",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_16:  MessageBox(NULL,"16 x 1 = 16\n16 x 2 = 32\n16 x 3 = 48\n16 x 4 = 64\n16 x 5 = 80\n16 x 6 = 96\n16 x 7 = 112\n16 x 8 = 128\n16 x 9 = 144\n16 x 10 = 160\n16 x 11 = 176\n16 x 12 = 192",  "16",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_17:  MessageBox(NULL,"17 x 1 = 17\n17 x 2 = 34\n17 x 3 = 51\n17 x 4 = 68\n17 x 5 = 85\n17 x 6 = 102\n17 x 7 = 119\n17 x 8 = 136\n17 x 9 = 153\n17 x 10 = 170\n17 x 11 = 187\n17 x 12 = 204",  "17",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_18:  MessageBox(NULL,"18 x 1 = 18\n18 x 2 = 36\n18 x 3 = 54\n18 x 4 = 72\n18 x 5 = 90\n18 x 6 = 108\n18 x 7 = 126\n18 x 8 = 144\n18 x 9 = 162\n18 x 10 = 180\n18 x 11 = 198\n18 x 12 = 216",  "18",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_19:  MessageBox(NULL,"19 x 1 = 19\n19 x 2 = 38\n19 x 3 = 57\n19 x 4 = 76\n19 x 5 = 95\n19 x 6 = 114\n19 x 7 = 133\n19 x 8 = 152\n19 x 9 = 171\n19 x 10 = 190\n19 x 11 = 209\n19 x 12 = 228",  "19",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_20:  MessageBox(NULL,"20 x 1 = 20\n20 x 2 = 40\n20 x 3 = 60\n20 x 4 = 80\n20 x 5 = 100\n20 x 6 = 120\n20 x 7 = 140\n20 x 8 = 160\n20 x 9 = 180\n20 x 10 = 200\n20 x 11 = 220\n20 x 12 = 240",  "20",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_21:  MessageBox(NULL,"21 x 1 = 21\n21 x 2 = 42\n21 x 3 = 63\n21 x 4 = 84\n21 x 5 = 105\n21 x 6 = 126\n21 x 7 = 147\n21 x 8 = 168\n21 x 9 = 189\n21 x 10 = 210\n21 x 11 = 231\n21 x 12 = 252",  "21",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_22:  MessageBox(NULL,"22 x 1 = 22\n22 x 2 = 44\n22 x 3 = 66\n22 x 4 = 88\n22 x 5 = 110\n22 x 6 = 132\n22 x 7 = 154\n22 x 8 = 176\n22 x 9 = 198\n22 x 10 = 220\n22 x 11 = 242\n22 x 12 = 264",  "22",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_23:  MessageBox(NULL,"23 x 1 = 23\n23 x 2 = 26\n23 x 3 = 69\n23 x 4 = 92\n23 x 5 = 115\n23 x 6 = 138\n23 x 7 = 161\n23 x 8 = 184\n23 x 9 = 207\n23 x 10 = 230\n23 x 11 = 253\n23 x 12 = 276",  "23",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_24:  MessageBox(NULL,"24 x 1 = 24\n24 x 2 = 48\n24 x 3 = 72\n24 x 4 = 96\n24 x 5 = 120\n24 x 6 = 144\n24 x 7 = 168\n24 x 8 = 192\n24 x 9 = 216\n24 x 10 = 240\n24 x 11 = 264\n24 x 12 = 288",  "24",MB\_OK | MB\_DEFBUTTON1);  break;  case ID\_FILE\_25:  MessageBox(NULL,"25 x 1 = 25\n25 x 2 = 50\n25 x 3 = 75\n25 x 4 = 100\n25 x 5 = 125\n25 x 6 = 150\n25 x 7 = 175\n25 x 8 = 200\n25 x 9 = 225\n25 x 10 = 250\n25 x 11 = 275\n25 x 12 = 300",  "25",MB\_OK | MB\_DEFBUTTON1);    case ID\_FILE\_EXIT:  PostMessage(hWnd, WM\_CLOSE, 0, 0);  break;  }  break;    case WM\_CLOSE:  DestroyWindow(hWnd);  break;  case WM\_DESTROY:  PostQuitMessage(0);  break;  default:  return DefWindowProc(hWnd, message, wParam, lParam);  }  return 0;  } |
| //resource.rc  #include "resource.h"  IDR\_MYMENU MENU  BEGIN  POPUP "&1-12"  BEGIN  MENUITEM "1", ID\_FILE\_1  MENUITEM "2", ID\_FILE\_2  MENUITEM "3", ID\_FILE\_3  MENUITEM "4", ID\_FILE\_4  MENUITEM "5", ID\_FILE\_5  MENUITEM "6", ID\_FILE\_6  MENUITEM "7", ID\_FILE\_7  MENUITEM "8", ID\_FILE\_8  MENUITEM "9", ID\_FILE\_9  MENUITEM "10", ID\_FILE\_10  MENUITEM "11", ID\_FILE\_11  MENUITEM "12", ID\_FILE\_12  MENUITEM "E&xit", ID\_FILE\_EXIT  END  POPUP "&13-25"  BEGIN  MENUITEM "13", ID\_FILE\_13  MENUITEM "14", ID\_FILE\_14  MENUITEM "15", ID\_FILE\_15  MENUITEM "16", ID\_FILE\_16  MENUITEM "17", ID\_FILE\_17  MENUITEM "18", ID\_FILE\_18  MENUITEM "19", ID\_FILE\_19  MENUITEM "20", ID\_FILE\_20  MENUITEM "21", ID\_FILE\_21  MENUITEM "22", ID\_FILE\_22  MENUITEM "23", ID\_FILE\_23  MENUITEM "24", ID\_FILE\_24  MENUITEM "25", ID\_FILE\_25  MENUITEM "E&xit", ID\_FILE\_EXIT  END  END  //IDI\_MYICON ICON "menu\_one.ico" |
| // resource.h  #define IDR\_MYMENU 101  #define IDI\_MYICON 201  #define ID\_FILE\_EXIT 9001  #define ID\_FILE\_1 9002  #define ID\_FILE\_2 9003  #define ID\_FILE\_3 9004  #define ID\_FILE\_4 9005  #define ID\_FILE\_5 9006  #define ID\_FILE\_6 9007  #define ID\_FILE\_7 9008  #define ID\_FILE\_8 9009  #define ID\_FILE\_9 9010  #define ID\_FILE\_10 9011  #define ID\_FILE\_11 9012  #define ID\_FILE\_12 9013  #define ID\_FILE\_13 9014  #define ID\_FILE\_14 9015  #define ID\_FILE\_15 9016  #define ID\_FILE\_16 9017  #define ID\_FILE\_17 9018  #define ID\_FILE\_18 9019  #define ID\_FILE\_19 9020  #define ID\_FILE\_20 9021  #define ID\_FILE\_21 9022  #define ID\_FILE\_22 9023  #define ID\_FILE\_23 9024  #define ID\_FILE\_24 9025  #define ID\_FILE\_25 9026 |
| ความสามรถของโปรแกรม |
| โปรแกรม จะทำการแสดงสูตรคูณตามแม่สูตรคูณ ที่เรากดในแถบเมนูโดยในที่นี้ มีตั้งแต่แม่ 1 - 25  เมื่อกดปุ่ม EXIT ที่เมนูหรือ ปุ่ม X สี่แดงที่มุมบนขวาจะทำการปิดหน้าต่างของโปรแกรม |
| รูปภาพ |
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