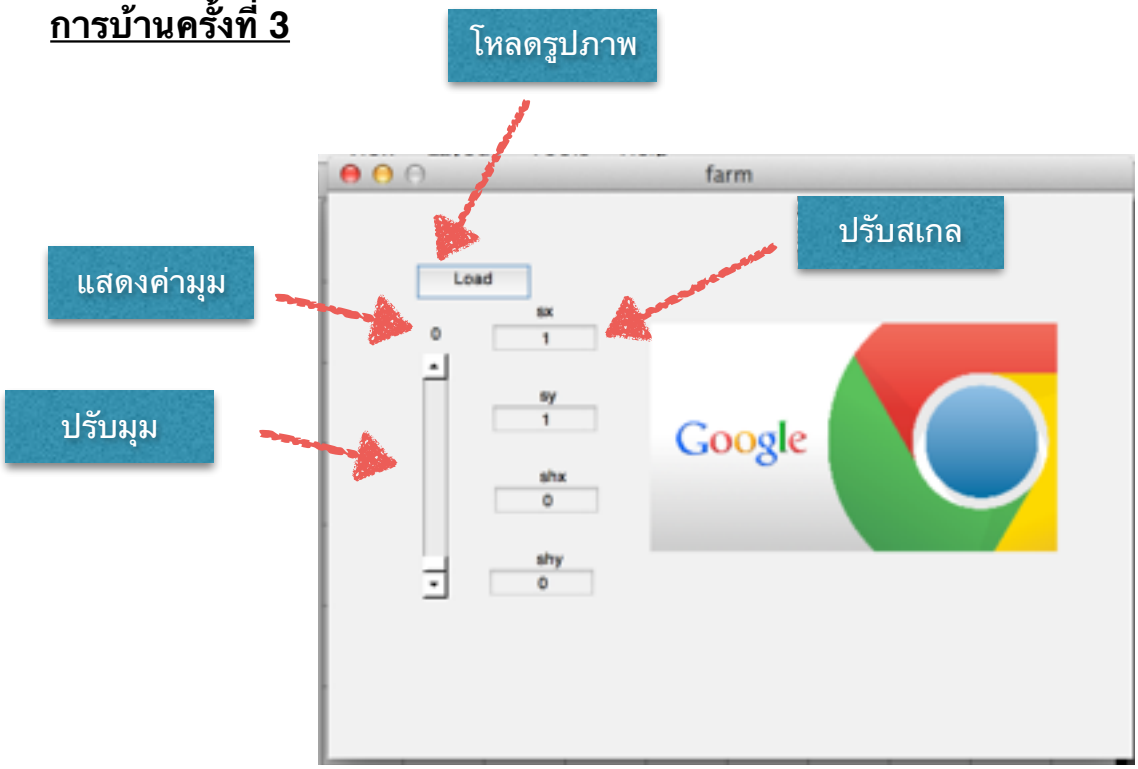
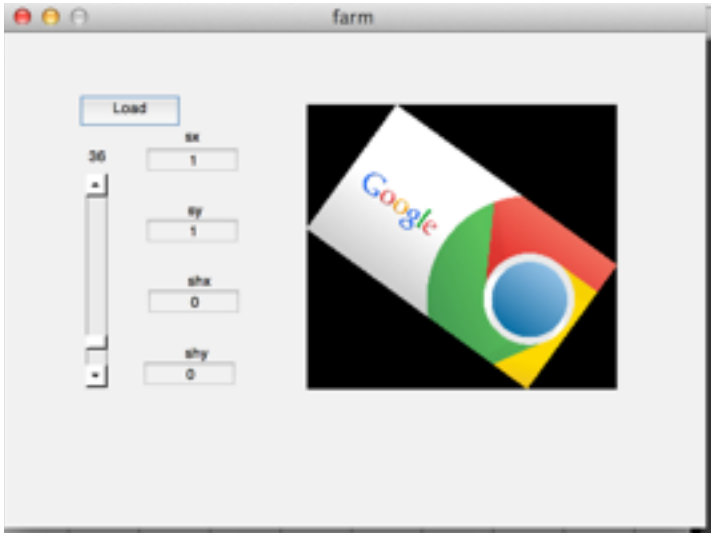
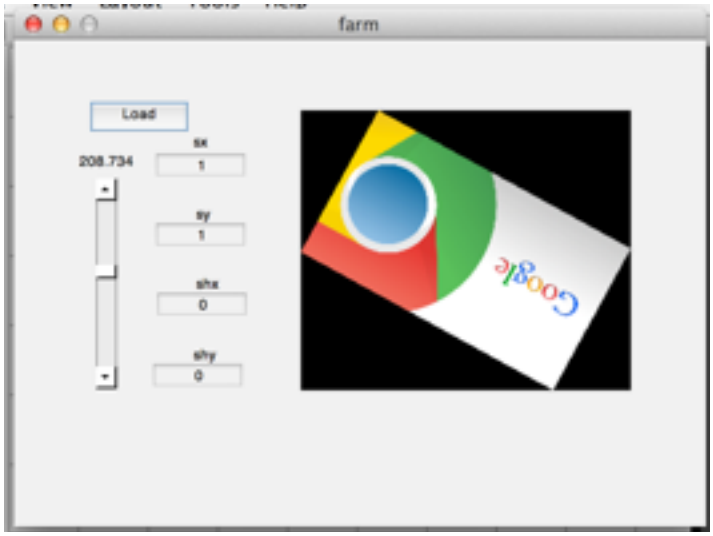
นายพัศพงศ์ เจริญพันธ์ รหัส 54010906

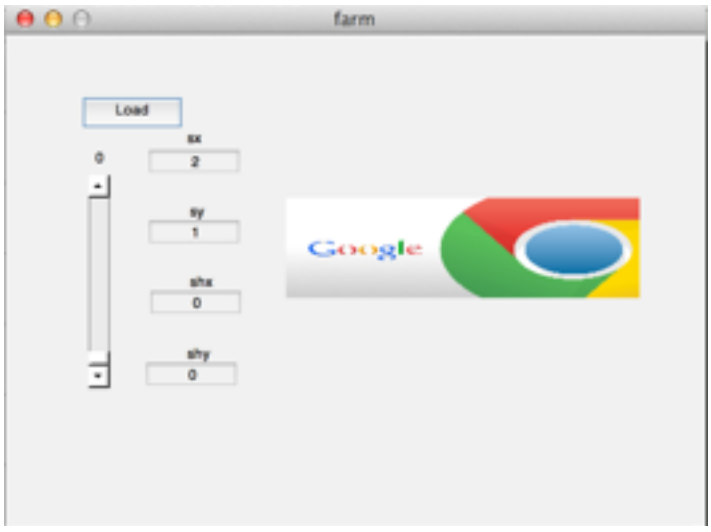
การบ้านครั้งที่ 3



เมื่อปรับค่าต่างๆ







Code

```
function varargout = farm(varargin)
% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name',       mfilename, ...
                   'gui_Singleton',  gui_Singleton, ...
                   'gui_OpeningFcn', @farm_OpeningFcn, ...
                   'gui_OutputFcn',  @farm_OutputFcn, ...
                   'gui_LayoutFcn',  [] , ...
                   'gui_Callback',   []);
if nargin && ischar(varargin{1})
    gui_State.gui_Callback = str2func(varargin{1});
end

if nargout
    [varargout{1:nargout}] = gui_mainfcn(gui_State, varargin{:});
else
    gui_mainfcn(gui_State, varargin{:});
end
% End initialization code - DO NOT EDIT


% --- Executes just before farm is made visible.
function farm_OpeningFcn(hObject, eventdata, handles, varargin)
% Choose default command line output for farm
handles.output = hObject;
handles.sx = 1;
handles.sy = 1;
handles.shx = 0;
handles.shy = 0;
handles.theta = 45;
% Update handles structure
guidata(hObject, handles);
% UIWAIT makes farm wait for user response (see UIRESUME)
% uiwait(handles.figure1);
% --- Outputs from this function are returned to the command line.
function varargout = farm_OutputFcn(hObject, eventdata, handles)
varargout{1} = handles.output;


% --- Executes on slider movement.
function slider1_Callback(hObject, eventdata, handles)
theta=get(hObject,'Value');
handles.theta = theta*pi/180;
set(handles.text5,'String',theta)
guidata(hObject,handles);
```

```
function slider1_CreateFcn(hObject, eventdata, handles)
if isequal(get(hObject,'BackgroundColor'), get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor',[.9 .9 .9]);
end



function edit1_Callback(hObject, eventdata, handles)
handles.sx=str2double(get(hObject,'String'));
guidata(hObject,handles);

% --- Executes during object creation, after setting all properties.
function edit1_CreateFcn(hObject, eventdata, handles)
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end



function edit2_Callback(hObject, eventdata, handles)
handles.sy=str2double(get(hObject,'String'));
guidata(hObject,handles);


% --- Executes during object creation, after setting all properties.
function edit2_CreateFcn(hObject, eventdata, handles)
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end



function edit3_Callback(hObject, eventdata, handles)
handles.shx=str2double(get(hObject,'String'));
guidata(hObject,handles);


% --- Executes during object creation, after setting all properties.
function edit3_CreateFcn(hObject, eventdata, handles)
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end
```

```
function edit4_Callback(hObject, eventdata, handles)
handles.shx=str2double(get(hObject,'String'));
guidata(hObject,handles);


% --- Executes during object creation, after setting all properties.
function edit4_CreateFcn(hObject, eventdata, handles)
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end


% --- Executes on button press in pushbutton1.
function pushbutton1_Callback(hObject, eventdata, handles)
f=imread('/Users/passaporng/Desktop/robin.png');
Tscale=[handles.sx 0 0;0 handles.sy 0;0 0 1];
Trotation=[cos(handles.theta) sin(handles.theta) 0; -sin(handles.theta) cos(handles.theta)
0;0 0 1];
Tshear=[1 handles.shx 0; handles.shy  1 0;0 0 1];
T=Tscale*Trotation*Tshear;
tform=maketform('affine',T);
g=imtransform(f,tform,'bilinear');
imshow(g);


% --- Executes during object creation, after setting all properties.
function text5_CreateFcn(hObject, eventdata, handles)
% hObject    handle to text5 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called
```