A.SOURCE CODE:

```
function varargout = guidemo(varargin)
% GUIDEMO MATLAB code for guidemo.fig
%      GUIDEMO, by itself, creates a new GUIDEMO or raises the existing
%      singleton*.
%
%      H = GUIDEMO returns the handle to a new GUIDEMO or the handle
to
%      the existing singleton*.
%
%      GUIDEMO('CALLBACK',hObject,eventData,handles,...) calls the
local
%      function named CALLBACK in GUIDEMO.M with the given input
arguments.
%
%      GUIDEMO('Property','Value',...) creates a new GUIDEMO or raises
the
%      existing singleton*.  Starting from the left, property value pairs are
%      applied to the GUI before guidemo_OpeningFcn gets called.  An
%      unrecognized property name or invalid value makes property
application
%      stop.  All inputs are passed to guidemo_OpeningFcn via varargin.
%
%      *See GUI Options on GUIDE's Tools menu.  Choose "GUI allows
only one
%      instance to run (singleton)".
```

```
%
% See also: GUIDE, GUIDATA, GUIHANDLES

% Edit the above text to modify the response to help guidemo

% Last Modified by GUIDE v2.5 18-Feb-2019 17:23:38

% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name',       mfilename, ...
                   'gui_Singleton',  gui_Singleton, ...
                   'gui_OpeningFcn', @guidemo_OpeningFcn, ...
                   'gui_OutputFcn',  @guidemo_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 guidemo is made visible.
function guidemo_OpeningFcn(hObject, eventdata, handles, varargin)
% This function has no output args, see OutputFcn.
% hObject    handle to figure
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% varargin   command line arguments to guidemo (see VARARGIN)

% Choose default command line output for guidemo
handles.output = hObject;

handles.output = hObject;

a=ones([256 256]);
axes(handles.axes2);imshow(a);
axes(handles.axes3);imshow(a);
axes(handles.axes4);imshow(a);

% Update handles structure
guidata(hObject, handles);

% UIWAIT makes guidemo wait for user response (see UIRESUME)
% uiwait(handles.figure1);


% --- Outputs from this function are returned to the command line.
function varargout = guidemo_OutputFcn(hObject, eventdata, handles)
```

```
% varargout  cell array for returning output args (see VARARGOUT);
% hObject    handle to figure
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)

% Get default command line output from handles structure
varargout{1} = handles.output;



function edit1_Callback(hObject, eventdata, handles)
% hObject    handle to edit1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of edit1 as text
%        str2double(get(hObject,'String')) returns contents of edit1 as a double



% --- Executes during object creation, after setting all properties.
function edit1_CreateFcn(hObject, eventdata, handles)
% hObject    handle to edit1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called

% Hint: edit controls usually have a white background on Windows.
%       See ISPC and COMPUTER.
```

```
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end


% --- Executes on button press in Speak.
function Speak_Callback(hObject, eventdata, handles)
% hObject    handle to Speak (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)g

% a=get(handles.edit1,'String')
recognizedText=handles.recognizedText;
tts(recognizedText);

% Update handles structure
guidata(hObject, handles);


% --- Executes on button press in classify.
function classify_Callback(hObject, eventdata, handles)
% hObject    handle to classify (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% [filename, pathname] = uigetfile('*.*', 'Pick a image file');
%     if isequal(filename,0) || isequal(pathname,0)
```

```
%       disp('User pressed cancel')
%     else
%       disp(['User selected ', fullfile(pathname, filename)])
%       file=imread(filename);
% %         axes(handles.axes1);
global file
% file=handles.file;
axes(handles.axes3);
      imshow(file);
      ocrResults=ocr(file);
      recognizedText=ocrResults.Text;
      testdat{1}=recognizedText;
      set(handles.resultbox,'String',recognizedText);
      xlswrite('new.xlsx',testdat)


handles.recognizedText=recognizedText;

% Update handles structure
guidata(hObject, handles);


% --- Executes on button press in browse.
function browse_Callback(hObject, eventdata, handles)
% hObject    handle to browse (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
```

```
global im
cd images
   [file,path] = uigetfile('*.jpg;*.bmp;*.gif;*.png', 'Pick an Image File');
   im = imread(file);
cd ..
axes(handles.axes2);
imshow(im,[]);
% im.handles=im;


guidata(hObject, handles);



% --- Executes on button press in Pre_processing.
Function Pre_processing_Callback(hObject, eventdata, handles)
% hObject    handle to Pre_processing (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
global im
global file

% im = handles.im;

inp=imresize(im,[512 512]);

   if size(inp,3)>1
```

```
        inp = rgb2gray(inp);
    end
    file=inp;

    axes(handles.axes4);
    imshow(file,[]);


% file.handles=file;

guidata(hObject, handles);
```