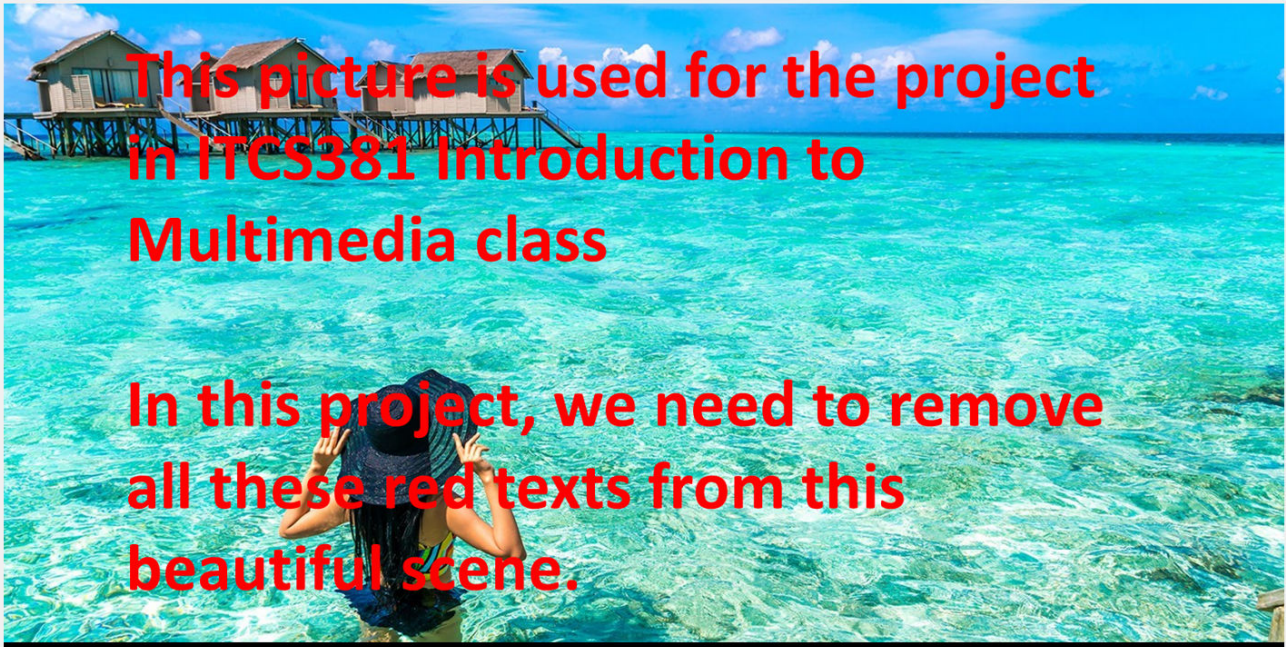


## Remove red-text overlay and then remove an object from an image

Read an image "oceanview01\_with\_text.png" and display it.

```
mg = imread("oceanview01_with_text.png");  
imshow(mg);
```



Create mask from red-text overlay. In this image, red texts has pure red colors (255, 0, 0). You should also make or expand the mask area to be a bit bigger than the area of red texts. You can use "imdilate" function to expand the mask area a bit.

```
m = mg;  
for i=1 : size(mg,1)  
    for j=1 : size(mg,2)  
        if(mg(i,j,1)==255 && mg(i,j,2)==0 && mg(i,j,3)==0)  
            m(i,j,1)=255;  
            m(i,j,2)=255;  
            m(i,j,3)=255;  
        else  
            m(i,j,1)=0;  
            m(i,j,2)=0;  
            m(i,j,3)=0;  
        end  
    end  
end  
std_dev = 1;  
s = imgaussfilt(double(m), std_dev);
```

Display original mask and expanded mask.

```
montage({m,s});
```

This picture is used for the project  
in ITCS381 Introduction to  
Multimedia class

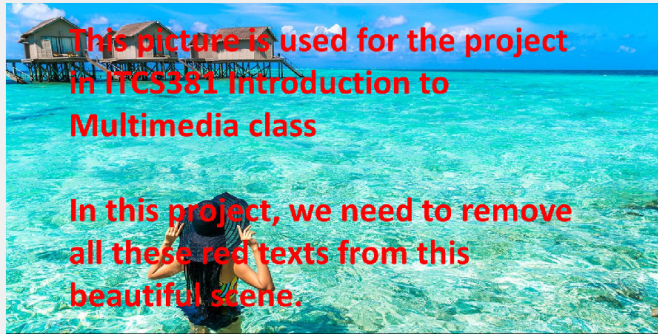
In this project, we need to remove  
all these red texts from this  
beautiful scene.

**This picture is used for the project  
in ITCS381 Introduction to  
Multimedia class**

**In this project, we need to remove  
all these red texts from this  
beautiful scene.**

Display original red-text image and expanded mask.

```
montage({mg,s});
```



**This picture is used for the project  
in ITCS381 Introduction to  
Multimedia class**

**In this project, we need to remove  
all these red texts from this  
beautiful scene.**

Using inpaintCoherent function to remove red-text overlay.

```
s= imbinarize(s);  
s= s(:,:,size(mg,3)-1);  
s= inpaintCoherent(mg,s);
```

Display the original red-text image and the removed-red-text image version.

```
montage({mg,s});
```





Display only the removed-red-text image version.

```
imshow(s);
```

Use the `drawfreehand` function to select a region of interest (ROI) for inpainting. In this task, you will remove the woman out from the image.

```
d = drawfreehand;
```



Use the `createMask` function to generate a mask from the selected ROIs.

```
c = createMask(d);
```

Display the image to be inpainted (the removed-red-text image) and its corresponding mask image.

```
montage({s,c});
```

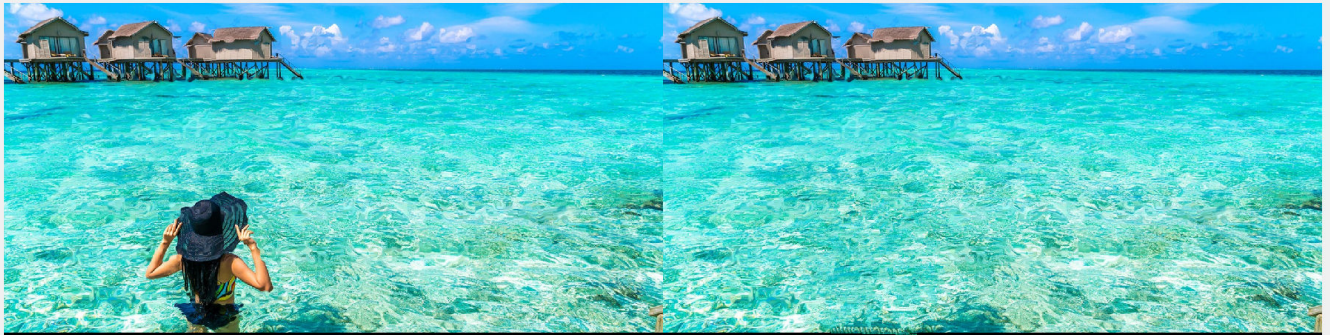


Remove objects in the ROI by using the inpaintExemplar function.

```
ex = inpaintExemplar(s,c);
```

Display the removed-red-text image and the inpainted or the removed-woman image.

```
montage({s,ex});
```



Display only the final image.

```
imshow(ex);
```



