

ORS Image Project

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Dependencies.

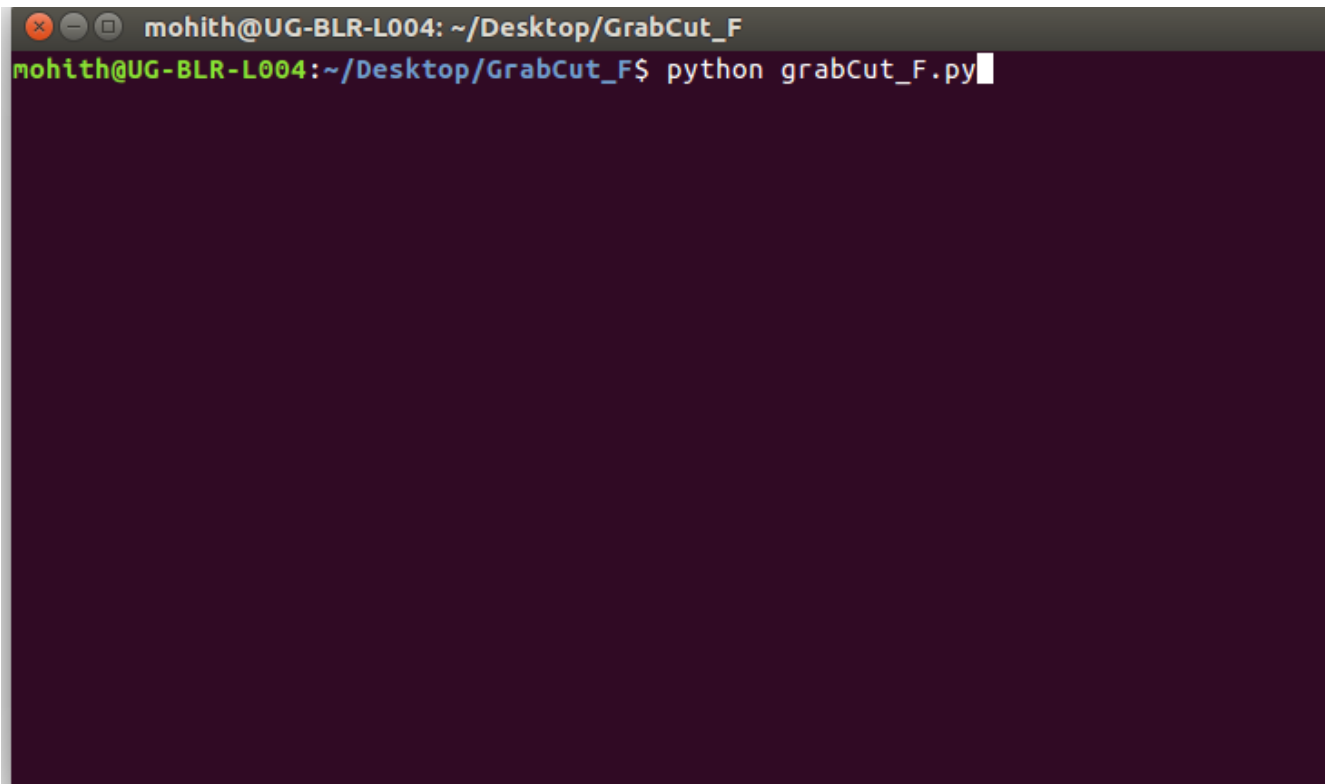
- Python 2.7
- OpenCv 3.0
- PIP (To install python libraries)
- Python Libraries:
Numpy, Operator, PIL, Image, OS, JSON, Time, Ast, Matplotlib, PyExcel_ods.
- Python libraries can be installed simply using pip.

Step-1

- Login into Ubuntu System.
- Download and unpack the folder – GrabCut_F in your preferred location.
- Copy grabCut_F.py file and product.ods (excel file in Ubuntu) and past them in the folder where your input folders exist.
- **(They can be anywhere. But for if it is near input folders path you need to give will be simple) .
- Create empty output folders for all input folders.
- For each run, you will have to give both input folder name and output folder name as input.

Step-2

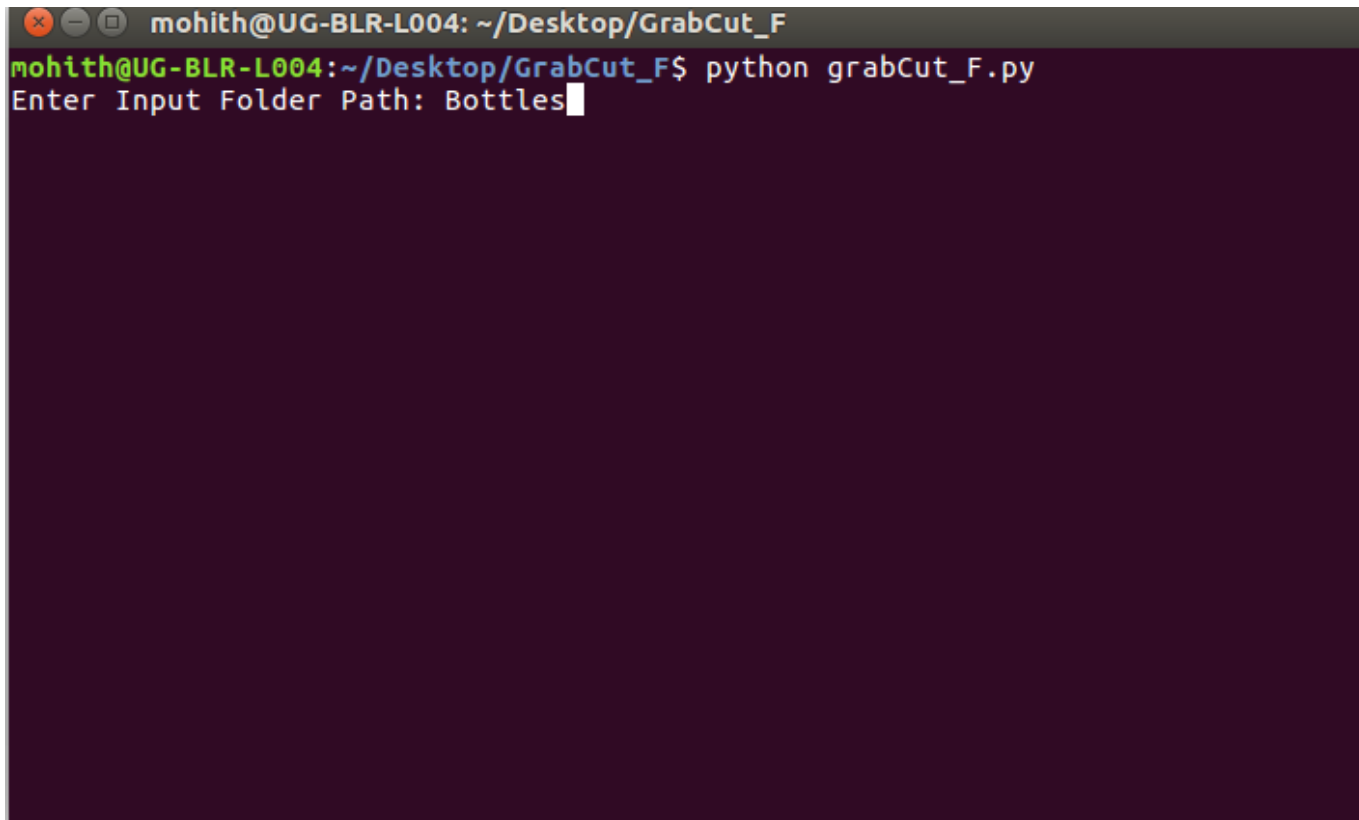
- Open terminal (ctr + alt + t) .
- Navigate to the folder where you pasted grabCut_F.py and product.ods.
- Run the python script – *python grabCut_F.py*.

A terminal window with a dark purple background. The title bar shows 'mohith@UG-BLR-L004: ~/Desktop/GrabCut_F'. The prompt is 'mohith@UG-BLR-L004:~/Desktop/GrabCut_F\$' and the command 'python grabCut_F.py' has been entered, with a white cursor at the end.

```
mohith@UG-BLR-L004: ~/Desktop/GrabCut_F
mohith@UG-BLR-L004:~/Desktop/GrabCut_F$ python grabCut_F.py
```

Step-3

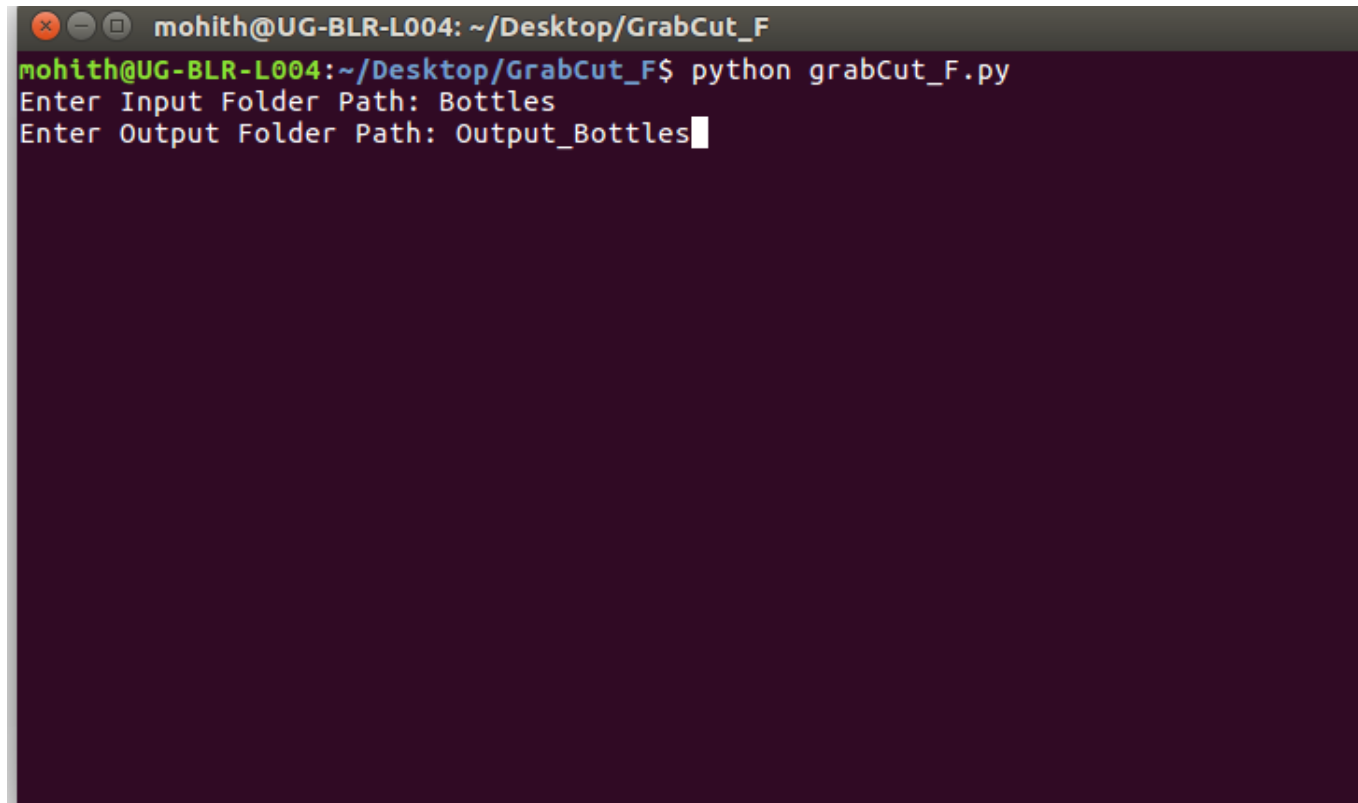
- Enter path to input folder. Path should be from the grabCut_F.py file to the input folder.
- Be careful. Wrong path gives errors.



```
mohith@UG-BLR-L004: ~/Desktop/GrabCut_F
mohith@UG-BLR-L004:~/Desktop/GrabCut_F$ python grabCut_F.py
Enter Input Folder Path: Bottles
```

Step-4

- Enter path to output folder (folder you initially created).
Path should be from the grabCut_F.py file to the output folder.
- Be careful. Wrong path gives errors.



```
mohith@UG-BLR-L004: ~/Desktop/GrabCut_F
mohith@UG-BLR-L004:~/Desktop/GrabCut_F$ python grabCut_F.py
Enter Input Folder Path: Bottles
Enter Output Folder Path: Output_Bottles
```

Step-5

- Enter excel file (.ods in Ubuntu) name.
- Make sure you have product names in 1st column and product numbers in 2nd column.

```
mohith@UG-BLR-L004: ~/Desktop/GrabCut_F
mohith@UG-BLR-L004:~/Desktop/GrabCut_F$ python grabCut_F.py
Enter Input Folder Path: Bottles
Enter Output Folder Path: Output_Bottles
Enter Excel File Path: product.ods
```

Step-6

- Enter E values – E1, E2, E3, E4. - Crucial Step
- E values can be [-5,-4,-3,-2,-1,+0,+1,+2,+3,+4,+5] .
- In most of the cases they will be [-3,-2,-1,+0,+1,+2,+3] .
- These E values are going to decide the perfectness of output.
- For similar images, they would be similar.
- So you have to run a folder with similar images.
- For the exceptional images in the folder :

Run the program separately for only that image with different E values.

 If (expected output):

 Done

 else :

 Should be done manually using photoshop.

Step-6

- E values. Trail and error method.
- Try values from [-5,+5] until you get expected output.
- Enter 0 as +0.
- Entering only 0 leads to errors.

```
mohith@UG-BLR-L004: ~/Desktop/GrabCut_F
mohith@UG-BLR-L004:~/Desktop/GrabCut_F$ python grabCut_F.py
Enter Input Folder Path: Bottles
Enter Output Folder Path: Output_Bottles
Enter Excel File Path: product.ods
Try values of bounding errors, e1,e2,e3,e4 - in range [-5,+5] untill you get des
ired output
Enter sign followed by integer value
If zero enter +0
E1: +3
E2: +3
E3: +0
E4: +0
```

Step-7 (Single Image Run)

- Exceptional images are to be run separately with different E values until you get expected output.
- Run grabCut_F_Single.py.
- Inputs are :
 1. Input image name (path).
 2. Excel file name (path).
 3. E values.
- Try various possibilities of E values until you get a better output. (Trail and error) .
- If none of them works – Do it manually using photoshop.