

Interview Questions:

1.What is PIL/Pillow?

Pillow (PIL fork) is a Python imaging library used to open, manipulate, and save image files in many formats (JPEG, PNG, BMP, etc.). It provides functions for resizing, cropping, filtering, and converting images.

2.How do you open and save images?

You can open and save images using Pillow like this:

```
from PIL import Image
```

```
img = Image.open("photo.jpg") # Open an image  
img.save("photo_resized.png") # Save image in a new format
```

3.What is the resize() method?

The resize() method changes the dimensions of an image.

Example:

```
resized_img = img.resize((800, 800))
```

4.How do you read all files in a directory?

Using the os module:

```
import os
```

```
for file in os.listdir("images_input"):  
    print(file)
```

It lists all files inside a folder.

5.What is the os module?

The os module in Python allows you to interact with the operating system, such as reading directories, creating folders, and handling file paths.

6.How do you change file formats (e.g., JPG to PNG)?

You just change the output file extension when saving:

```
img.save("output_image.png")
```

Pillow automatically converts the format.

7.What is a pixel?

A pixel (short for picture element) is the smallest unit of an image. Each pixel represents a single color or intensity value in a digital image.

8.What's the use of try-except here?

The try-except block handles errors gracefully, like when a file is corrupted or not an image:

```
try:  
img = Image.open(file)  
except Exception as e:  
print(f"Error: {e}")
```

9.How can you make the app dynamic?

You can make it dynamic by:

Taking user input for width, height, or folder path.

Using command-line arguments or a simple GUI to select folders.

Allowing different output formats.

10.Can this be extended to GUI?

Yes — you can use libraries like Tkinter or PyQt to create a Graphical User Interface where users can upload images, set resize dimensions, and view results visually.