```python
import cv2
import numpy as np
import matplotlib.pyplot as plt

def convert_image_to_occupancy_grid(image_path, grid_size):
    """
    Convert an image of a room layout into a 2D occupancy grid map.

    :param image_path: Path to the input image.
    :param grid_size: The size of the grid (width, height).
    :return: The occupancy grid map (numpy array).
    """
    # Load the image
    image = cv2.imread(image_path, cv2.IMREAD_GRAYSCALE)

    # Resize the image to the grid size
    resized_image = cv2.resize(image, grid_size)

    # Perform Canny edge detection
    edges = cv2.Canny(resized_image, 100, 200)

    # Convert the edges to binary
    binary_image = np.where(edges > 0, 255, 0)

    binary_image = cv2.bitwise_not(binary_image)
    # Return the occupancy grid map
    return binary_image
def main():
    image_path = r"C:\Users\moizp\Downloads\stitched_image.jpg"  # Replace with your image path
    grid_size = (100, 100)  # width, height of the occupancy grid

    # Convert the image to an occupancy grid
    occupancy_grid = convert_image_to_occupancy_grid(image_path, grid_size)

    # Display the occupancy grid
    plt.imshow(occupancy_grid, cmap='gray', origin='lower')
    plt.title("Occupancy Grid Map")
    plt.xlabel("X (grid cells)")
    plt.ylabel("Y (grid cells)")
    plt.show()

if _name_ == "_main_":
    main()
```