

CODE:

```
import cv2
```

```
import numpy as np
```

```
# Step 1: Read the image
```

```
image_path = r"C:\Users\harik\Downloads\CV LAB\MOUNTAIN.jpeg" # Replace with your image path
```

```
img = cv2.imread(image_path)
```

```
gray = cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
```

```
# Step 2: Convert to float32
```

```
gray = np.float32(gray)
```

```
# Step 3: Apply Harris Corner Detection
```

```
dst = cv2.cornerHarris(src=gray, blockSize=2, ksize=3, k=0.04)
```

```
# Step 4: Dilate to mark the corners
```

```
dst = cv2.dilate(dst, None)
```

```
# Step 5: Threshold for an optimal value (mark corners in red)
```

```
img[dst > 0.01 * dst.max()] = [0, 0, 255]
```

```
# Step 6: Show and Save the result
```

```
cv2.imshow('Harris Corners', img)
```

```
cv2.waitKey(0)
```

```
cv2.destroyAllWindows()
```

```
cv2.imwrite('harris_corners_detected.jpg', img)
```

OUTPUT:

