

Relative depth



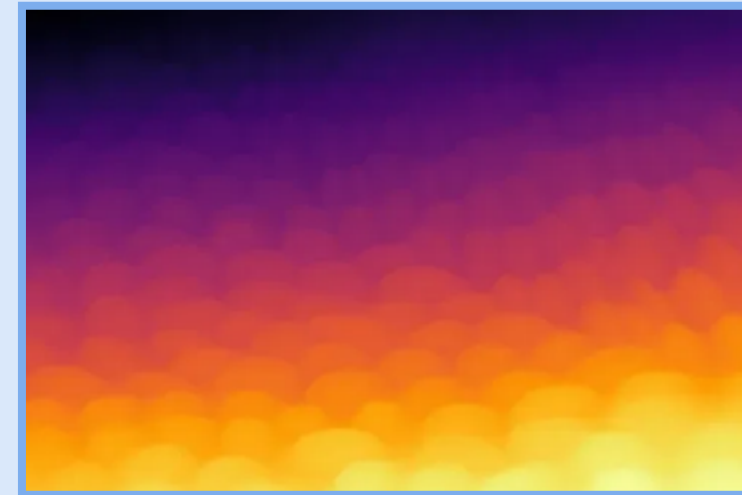
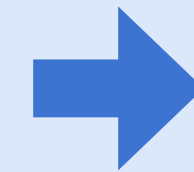
Which point is closer to the camera, A or B?



THOUGHT 1: I can use a depth estimation tool that provides a depth map with colors indicating distances.

ACTION 1: Call depth estimation

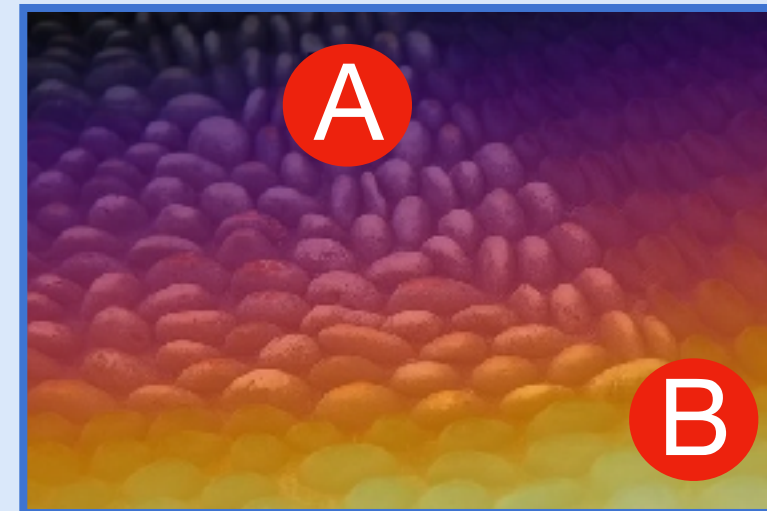
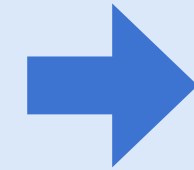
```
depth_map = depth(image)
display(depth_map)
```



THOUGHT 2: The depth map uses colors from purple (farther) to yellow (closer). I need to overlay the original image with the depth map

ACTION 2: Call overlay

```
overlay = overlay_images(depth_map, image)
display(overlay)
```



THOUGHT 3: It is evident that point B, in the yellow region, is closer to the camera compared to point A, which is in the purple region

Visual Search



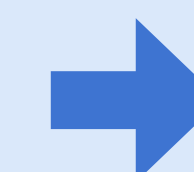
Tell me the number of that player who is shooting



THOUGHT 1: I need to detect the players in the image and zoom in on the player who is shooting to see the number clearly

ACTION 1: Call object detection

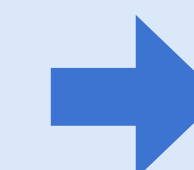
```
new_img, boxes = detection(image_1, ["player"])
display(new_img.annotated_image)
```



THOUGHT 2: From the image, Player2 seems to be shooting. I need to zoom in on this player to see the number on their jersey clearly

ACTION 2: Call zoom-in

```
shooter = boxes[1]
zoomed = zoom_in_image_by_bbox(image_1, shooter)
display(zoomed)
```



THOUGHT 3: From the zoomed-in image, I can clearly see that the number of the player who is shooting is 8