

34) Write a Python function to create a white image size entered by the user and then create a shape of Circle using Open CV.

Code:

```
import cv2
```

```
import numpy as np
```

```
def draw_circle_on_white_image(width, height):
```

```
    # Create a white image
```

```
    image = np.ones((height, width, 3), dtype=np.uint8) * 255
```

```
    # Calculate center and radius for the circle
```

```
    center = (width // 2, height // 2)
```

```
    radius = min(width, height) // 4 # Circle takes up 1/2 of the smaller dimension
```

```
    # Draw the circle (green color in BGR, thickness 3)
```

```
    cv2.circle(image, center, radius, color=(0, 255, 0), thickness=3)
```

```
    # Display the image
```

```
    cv2.imshow("Circle on White Image", image)
```

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

```
    cv2.destroyAllWindows()
```

```
    # Optionally save the image
```

```
    cv2.imwrite("circle_output.jpg", image)
```

```
# Example usage
```

```
width = int(input("Enter image width: "))
```

```
height = int(input("Enter image height: "))
```

```
draw_circle_on_white_image(width, height)
```

OUTPUT:

