

35) Write a Python function to create a text string entered by the user that must be appeared on the given image using Open CV.

CODE:

```
import cv2
```

```
import numpy as np
```

```
def put_text_on_image(image_width, image_height, user_text):
```

```
    # Create a white image
```

```
    image = np.ones((image_height, image_width, 3), dtype=np.uint8) * 255
```

```
    # Font settings
```

```
    font = cv2.FONT_HERSHEY_SIMPLEX
```

```
    font_scale = 1
```

```
    color = (0, 0, 0) # Black text
```

```
    thickness = 2
```

```
    # Get text size to center it
```

```
    (text_width, text_height), _ = cv2.getTextSize(user_text, font, font_scale, thickness)
```

```
    text_x = (image_width - text_width) // 2
```

```
    text_y = (image_height + text_height) // 2
```

```
    # Put the text on the image
```

```
    cv2.putText(image, user_text, (text_x, text_y), font, font_scale, color, thickness)
```

```
    # Display the image
```

```
    cv2.imshow("Text on Image", image)
```

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

```
    cv2.destroyAllWindows()
```


```
    # Optionally save the image
```

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

Example usage:

```
width = int(input("Enter image width: "))  
height = int(input("Enter image height: "))  
text = input("Enter the text to display: ")  
put_text_on_image(width, height, text)
```

OUTPUT:



The screenshot shows a terminal window with the following text:

```
C:\Users\harik\Downloads\CV LAB>python exp35.py  
Enter image width: 400  
Enter image height: 400  
Enter the text to display: HARIKA
```

Below the terminal window is a GUI window titled "Text on Image". The window contains a white rectangular area with the word "HARIKA" centered in black, bold, uppercase letters.