## Output images

## photo\_1.jpg



Blurred factor: 2

photo\_2.jpg



Blurred factor: 6

photo\_3.jpg



Blurred factor: 9

## **Explanations**

- **1.** The code allows the users to capture three facial expressions.
- **2.** The captured images will be saved as 'photo\_n.jpg' with n = 1, 2, 3 and displayed as such.
- **3.** The faces in the images will be blurred using Gaussian blurring based on image dimension and random blurring factor.

Blur intensity = 
$$\frac{image\ dimension\ (d)}{factor\ (f)} + x \begin{cases} x = 0\ if\ \frac{d}{f} = odd \\ x = 1\ if\ \frac{d}{f} = even \\ 0 < f < 10 \end{cases}$$

- **4.** Because the captured images will have the same dimensions, the blur intensity is mostly affected by the factor
- **5.** The smaller the factor, the blurrier the face.