Computational Photography (CSCI 3240U) — In-class Exercise

Please hand in this paper to the instructor before the end of the lecture.

Lastname (PRINT):	_____	Firstname:	_____
Student number:	_____	Date:	_____

Q. Consider the following image, use Taylor's Series to compute $(\frac{\partial I}{\partial x}, \frac{\partial I}{\partial y})$ and $(\frac{\partial^2 I}{\partial x^2}, \frac{\partial^2 I}{\partial y^2})$ at pixel $(3, 3)$. We use two neighbours on each side to compute the required derivatives.

Top left corresponds to pixel location $(0, 0)$