

	Max	Mark	Note
Note that markers also attach importance to accuracy and clarity in expression and implementation.			
Question 1			
1.1 Correct 3x3 moving average kernel and output.	5	5	
1.2 Correct 11x11 moving average kernel and output.	5	5	
1.3 Discussion mentions:			
Increased smoothness and noise suppression.	5	5	
More blurry and loss of sharpness.	5	5	
Question 2			
2.1 Correct 3x3 Prewitt kernel.	5	5	
Correct gradient magnitude image.	5	5	
2.2 Correct implementation of 2D Gaussian kernel.	5	5	
Proper visualisation of Gaussian kernel.	5	5	
Correct Gaussian smoothing and gradient magnitude			
2.3 image.	5	5	
Correct Gaussian smoothing and gradient magnitude			
2.4 image.	5	5	
Counting of computational time.	2	2	
2.5 Correct implementation of 1D Gaussian kernels.	5	5	
Proper visualisation of Gaussian kernels along x-axis and y-axis.	5	5	
2.6 Correct separable filtering and gradient magnitude image.	5	5	
Counting of computational time.	2	2	
Show the difference between two results.	2	0	
2.7 Discussion mentions:			
Gaussian smoothing suppresses noise in gradient magnitude image.	3	3	
Separable 1D Gaussian filtering leads to the same result as 2D Gaussian filtering.	3	0	
Separable filtering substantially accelerates the computation	3	1	
Question 3			
3.1 Expand numpy array dimension, convert to Pytorch tensor.	7	7	
3.2 Correct Gaussian kernel weight assignment.	7	7	
3.3 Correction filtering using Pytorch with reasonable output.	6	6	
Total		93	