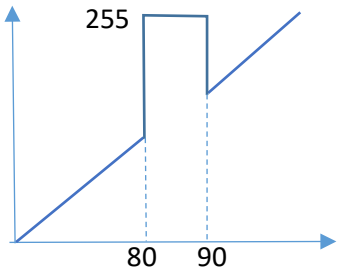
Name: Matric No.

1. Perform the "grey level slicing" to the image below. (20 marks)



77	88	89	45
156	78	56	66
200	155	79	78
34	82	87	83
125	84	81	83
223	33	34	82
92	67	34	134

2. Perform the 1x3 median filtering to the following one line image (20 marks)

1	1	1	1	10	1	1	1	2	3	4	5	16	7	8	8	3	8	8	8

3. Perform 1D convolution using the mask $\frac{1}{3}\{1 \quad 1 \quad 1\}$, round to the nearest integer. (20 marks)

1	1	1	1	10	1	1	1	2	3	4	5	16	7	8	8	3	8	8	8

4. Connect pixels 77 and 82 using N_8 , where $|p\text{-}q|<5$ (20 marks)

77	88	89	45
156	78	76	66
200	155	79	78
34	82	87	83
125	84	81	83
223	33	34	82
92	67	34	134

Q5 on back side.

5. Design a 5x5 Gaussian mask with $e^{-\frac{x^2+y^2}{2\sigma^2}}$, and $\sigma^2 = 2$. Show your workings. (20 marks)