This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL20CS70S31170065

TO ARNAB CHAKRABORTY 117, SAPTAGRAM STATION ROAD, DUM DUM(N),

BIRATI, KOLKATA - 700051. KOLKATA WEST BENGAL - 700051 PH. NO:8017787360



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.





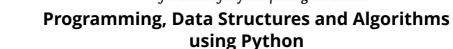
## ertification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to



for successfully completing the course



with a consolidated score of 89

Online Assignments Proctored Exam Programming Exam 25/25 25/25 38.75/50

Total number of candidates certified in this course: 1579

Devendra Jalihal

Prof. Devendra Jalihal Chairman Centre for Continuing Education, IITM

Sep-Nov 2020 (8 week course) **Prof. Andrew Thangaraj** 

NPTEL Coordinator IIT Madras



