

# SURE Trust



SURE Trust - Skill Upgradation for Rural-youth Empowerment Trust

Data Structures and Algorithms in Python

[G2 DSA IN PYTHON]

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**Course Report**

Welcome to the course report for the DATA STRUCTURES AND ALGORITHMS IN PYTHON! This README document provides an overview of the course, its Practical Assignments and the final project.

## Introduction to The SURE Trust:

SURE Trust empowers educated rural youth by bridging the gap between academic skills and industry demands. Offering personalized online training in fields like Cyber Security, Artificial Intelligence, Python Programming, and more, our four-month courses culminate in real industry projects for hands-on experience crucial in today's job market. All courses are free, eliminating any financial burden for students. SURE Trust mission is solely service-oriented, guiding unemployed rural youth toward successful careers or entrepreneurship. Partnering with various companies, it secure internships nationwide, facilitating career growth for the graduates.

## Vision of SURE Trust

Enhancing the employability of educated unemployed rural youth through 'Human values-based skill up-gradation in emerging technologies, with no cost to students.

## Functionality of SURE Trust

**SURE TRUST — a beacon of hope and empowerment for our rural youth.**

At the helm of this transformative initiative are extraordinary women, devoted and tenacious, forming the backbone of our management board. Their unwavering commitment spans across various crucial domains—from overseeing student enrollment to orchestrating the seamless collaboration with industry experts, securing live projects for our students' internship programs. Their dedication knows no bounds as they meticulously handle administrative intricacies, ensuring every aspect of our students' journey is guided with precision and care.

But it's not merely administrative prowess that defines us. SURE TRUST goes beyond conventional education; it fosters holistic development. Our life skill sessions, conducted diligently every Sunday, serve as a sanctuary for our students—an avenue to conquer fears, nurture confidence, and gain crystal-clear clarity about their career paths. These sessions are not just about imparting knowledge; they're about sculpting resilient individuals ready to conquer the challenges of the professional world.

Furthermore, our commitment to the holistic growth of each student is enshrined in our guiding principles. Through meticulous monitoring and adherence to the rulebook of SURE TRUST, every student is nurtured and guided at every step of their journey. It's not just about education; it's about nurturing dreams, fostering potential, and paving the way for a brighter future.

SURE TRUST isn't just an institution; it's a nurturing ground, a guiding light, and a catalyst for transformation. As we navigate the path ahead, our dedication remains unwavering, our commitment resolute, and our vision clear—to empower, to uplift, and to pave the way for a promising tomorrow for our rural youth.

## Experience while attending session

Attending daily course sessions and actively engaging in assignments and quizzes has been a transformative journey, a key pathway toward acquiring profound knowledge. Each session unfolded a wealth of insights, offering not just information but fostering a deeper understanding of the subject matter.

Consistency became the cornerstone of this learning experience. Each day's dedication in attending these sessions translated into a gradual but substantial accumulation of knowledge. It wasn't merely about passive learning; it was about active participation, absorbing concepts, and applying them through assignments and quizzes.

The assignments were more than tasks; they were opportunities to dive deeper, to grapple with the material, and to cultivate a hands-on understanding. Each quiz, meticulously prepared and earnestly answered, served as checkpoints, validating the knowledge gained and identifying areas for further exploration.

This daily commitment wasn't just a routine; it was a commitment to self-improvement, a testament to the hunger for knowledge. It instilled discipline, honed critical thinking skills, and kindled a passion for continuous learning.

The dividends reaped from this daily investment were immense. Concepts that once seemed daunting became familiar, and intricate details began to fall into place. The ability to apply learned knowledge in practical scenarios heightened, leading to a more comprehensive understanding of the subject matter.

## Overall Experience of course

"During my four-month journey in Data Structures and Algorithms in Python, guided by the dedicated Mr. Samuel John, I gained immense knowledge and a renewed passion for learning. Radha Kumari madam conducting Life Skills Training sessions were transformative, equipping us with invaluable tools for life's challenges.

What sets SURE Trust apart is its holistic approach, emphasizing discipline, social responsibility, and quality education over quantity. It nurtures well-rounded individuals through engaging activities like plantation drives and life skill development programs, fostering a commitment to social service.

The organization's advocacy for social initiatives, like 'EACH ONE PLANT TWO', encourages active participation in community welfare. Requiring students to plant trees, donate blood, and aid senior citizens instills a strong sense of responsibility and compassion.

In essence, SURE Trust isn't just a learning platform but an ecosystem fostering academic excellence, social consciousness, and a dedication to making a positive impact on the world."

## Practicals and Final Project

Below is a table summarizing the Practical Assignments and final project completed during the course:

Description	Link
<b>Practical:</b> Searching and Sorting	<a href="https://github.com/hemalatha331/Assignment_5">https://github.com/hemalatha331/Assignment_5</a>
<b>Practical:</b> LinkedList functionality	<a href="https://github.com/hemalatha331/Practical/blob/main/linkedList.py">https://github.com/hemalatha331/Practical/blob/main/linkedList.py</a>
<b>Practical:</b> Working of Stacks	<a href="https://github.com/hemalatha331/Practical">https://github.com/hemalatha331/Practical</a>
<b>Practical:</b> Queue Implementation	<a href="https://github.com/hemalatha331/Assignment-3">https://github.com/hemalatha331/Assignment-3</a>
<b>Practical:</b> Recursive implementation(Factorial,Fibonacci)	<a href="https://github.com/hemalatha331/Assignment_4">https://github.com/hemalatha331/Assignment_4</a>
<b>Practical:</b> BinaryTree And Traversals	<a href="https://github.com/hemalatha331/ASSIGNMENT_6">https://github.com/hemalatha331/ASSIGNMENT_6</a>
<b>Final Project:</b> PATH FINDER	<a href="https://github.com/hemalatha331/PATH-FINDER">https://github.com/hemalatha331/PATH-FINDER</a>

## CONCLUSION

For me Being part of this incredible journey with SURE Trust has been life-changing. Learning Data Structures and Algorithms in Python was just the beginning. Embracing discipline, engaging in service activities, and attending the enlightening Sunday sessions have shaped me beyond academics. This experience taught me more than just technical skills; it instilled discipline, emphasized service, and enriched my perspective on life. It's not just about learning; it's about becoming a responsible and compassionate individual. As this chapter concludes, I carry forward not only knowledge but a sense of duty and a commitment to making a positive impact. SURE Trust's holistic approach has prepared me not just for a career but for life's challenges, and I'm grateful for the invaluable lessons learned. Thank you SURE trust and it's a wonderful journey.

