



**PYTHON  
CODING  
FOR KIDS**

**COURSE  
CURRICULUM**

**GET READY TO**  
**Fall in love with Coding**



# About Mynsha

Our one stop learning platform provides unique courses for all age groups to spark their interest. Live learning classes, option of group or personal class, tutors who are passionate to make a difference provide a fun learning environment to enable you to do **what you like !**



## Our Mission

Spark interest in people of any age to learn skills for things they want to do by choice, which makes them happier.

## Our Magic Mantra



### Live Learning

Our live classes provide real time interaction and fun learning. Our passionate tutors work with learners to provide personalized feedback.



### Small Group Size

We offer both options of group class or personal class to choose what works best for you. Group classes only have max 4 students.



### Measure Success

We measure and track progress regularly during the course to ensure that the learner achieves the desired results.



# Founder's Note



 **Ruchi Sharma**  
Founder

I always loved teaching and worked as a lecturer in my initial career days, however, after moving to Australia more than a decade ago, I took up the job in HR. Coming from a family that follows Swami Vivekananda principles, I never gave up my willingness to pursue what I like. In 2022, Gaurav and I decided to come back to India with our two little kids, left our jobs and started Mynsha to enable people explore their interests. Throughout the journey, the mantra has always been, "Do not compare yourself with anyone, Be your Own Benchmark!"

 **Gaurav Tiwari**  
Co Founder & CEO

I always wanted to do business that improves the lives of people and makes the world a more happy place. After working in the IT industry for more than 16 years mostly in Australia, I decided to quit my job. Moved back from Melbourne to India for good and became a business partner with my life partner in our ed-tech startup, Mynsha. We want to enable people to take little steps to explore themselves and do things that they really like.





# Empowering kids to become innovators of the future

## Why should kids learn coding?



Coding is the new literacy.

In recent years, technology has made inroads into an aspect of our lives. We've come to rely on websites apps and gadgets to help us through the day, whether at work or home.

Given the enormous role technology is going to play in the future, teaching kids to code is the best way to prepare them for success.

## What are the benefits of learning python coding?

- **Simplicity and Readability:** Easy to learn with simple syntax.
- **Versatility:** Used in web development, AI, data science, etc.
- **Strong Community Support:** Abundant resources and tutorials.
- **Encourages Good Coding Practices:** Promotes clean, maintainable code.
- **Immediate Results:** Interactive shell for instant feedback.



## Why this Curriculum?



- **Child-Centric Approach:** Age-appropriate content and activities.
- **Hands-On Learning:** Projects and exercises for practical application.
- **Step-by-Step Progression:** Gradual build-up of concepts.
- **Enhances your math skills and fun.**
- **Interactive and Fun:** Engaging lessons with games and real-world applications.
- **Experienced Instructors:** Skilled and supportive teachers for young learners.



# Enhance your kid's Math & Science concepts

```

Operations on Sets

Show files

Set : {1, 2, 3, 4}
Updated Set: {1, 2, 3, 4, 5}

Set 1 {1, 2, 3, 4, 5}
Set 2 {2, 4, 6}
Difference
{1, 3, 5}
Symmetric Difference
{1, 3, 5, 6}

```

## Set Operations

Our engineered coding courses covers essential maths concepts like prime numbers, factorials, sets, statistics, probability, etc., helping students understand the concepts and implement them in the practical world. It also helps them in building strong logic for problem-solving.

Coders must strengthen their algorithmic and computational thinking to write a line of code that works well and is bug-free. And what is a possible way of thinking at their core? Math.

```

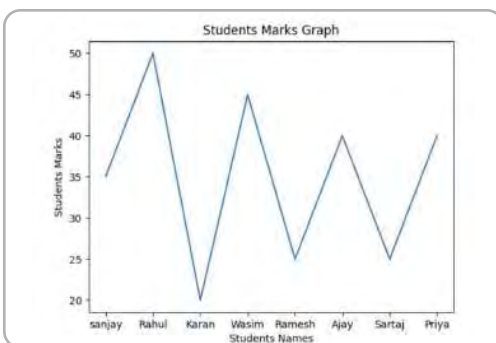
Prime Number Check

Show files

Enter number to be checked :29
29 is a prime number
> 

```

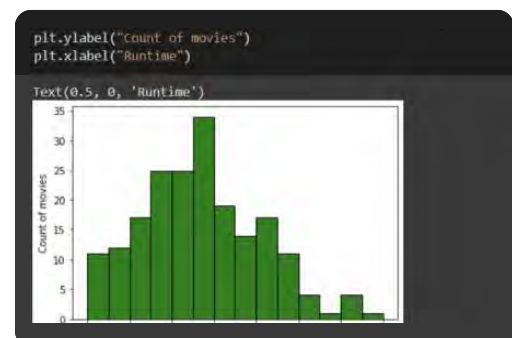
## Prime Number Check



## Student's Marks Graph

Our teachers provide individual attention to kids, customize projects based on their interests and make them fall in love with Coding, Maths and Science.

With all the data available, Maths plays a vital role in identifying various patterns and answering questions to explain human behaviour for implementing the same while automating a task. This is where coding and Maths go hand-in-hand.



## IMDB Ratings Data Analysis



# Python Course-Module 1

## Objective

This Python coding module for kids introduces fundamental programming concepts, including algorithms and flowcharts, and dives into Python basics such as installation, IDEs, and simple programs. It covers data manipulation with operators, essential data types, and data structures like lists and dictionaries. Students will also learn to make decisions with conditional statements and automate tasks with loops, making their code more dynamic and efficient. Each lesson includes assignments, quizzes, and practical programming exercises to reinforce learning.

### LESSON 1

#### Python Fundamentals

Understanding computer Programs, Programming languages, Why Python for kids, Python History, algorithms, flowcharts, and various applications of Python.



Assignment-1  
10 questions



Quiz-1  
10 Questions

### LESSON 2

#### Getting started with Python

Installing and Learning about Python IDE'S: PyCharm, Spyder, jupyter Notebook, VS Code, Atom. Printing statements, Keyboard input, identifiers, keywords, and variables, Write and run Your First Python Program.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+8

### LESSON 3

#### Perform various operations on Data using Operators

Arithmetic, Comparison, Logical, Assignment, Bitwise, Identity, Membership.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+12

### LESSON 4

#### Learning Datatypes and Data Structure

Choosing appropriate data structure is an art Numeric Types, Boolean, None, List, tuples, sets, dictionary, Strings, Learn Various operations on data Structure, Understanding stack, and queue.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+15

### LESSON 5

#### Making Decisions

Enabling you to write more dynamic and flexible code if Statement, if-else, if-elif-else, Nested if, making logical conditions, execute different blocks of code based on certain decisions.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+20

### LESSON 6

#### Going Loopy

Learn Automation of Repetitive Tasks and Reducing Code. Length For, while, nested loop, control over loop execution: break, continue, learn printing specific patterns of characters, numbers, or symbols, generate sequences.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+25



# Python Course-Module 2

## Objective

Covers essential programming topics, starting with functions to create reusable and organized code. It explains modules for code structuring and introduces object-oriented programming concepts like classes, inheritance, and polymorphism. Students will also learn about error detection and handling with exceptions, and delve deeper into data structures by implementing stacks and queues. Each lesson is reinforced with assignments, quizzes, and hands-on programming exercises to solidify understanding.

### LESSON 1

#### Python Functions

Break down your code into manageable pieces. What is Function, Def keyword, Function Arguments, Scope and Lifetime of Variables, Lambda Functions, Recursion, Built-in Functions, Function Decorators.



Assignment-1  
10 questions



Quiz-1  
10 Questions

### LESSON 2

#### Python Modules

Structuring, organizing, and reusing code in Python understanding modules in Python, Why use modules? Importing modules, Random and Math Module, Date Time and calendar, installing module using pip



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+8

### LESSON 3

#### Object-Oriented Programming

Understand, extend, and debug software code. Understanding the basic concepts of OOP (objects, classes, inheritance, encapsulation, and polymorphism), Classes, Objects, Class attributes and instance attributes, Class methods and instance methods, Constructor (`__init__`) and destructor (`__del__`) methods.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+12

### LESSON 4

#### Learn Inheritance & Polymorphism

Understanding the concept of inheritance, Motivation behind inheritance, Creating Subclasses, Types of Inheritance, Learning polymorphism: Method overriding, Operator Overloading, Method overloading, Method Resolution order



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+15

### LESSON 5

#### Python Exception Handling

Learn Error Detection and Reporting. Introduction to Exceptions, Types of errors: syntax errors and exceptions, try-except Blocks, Raising Exceptions, The Finally Block, Exception Handling Best Practices, built-in exception types.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+20

### LESSON 6

#### Data Structure-II Stack & Queues

Introduction to Stack: Implementation of Stack in Python, Stack Application, Introduction to queues, Implementation of queues in Python, Application of queues.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+25



# Python Course-Module 3

## Objective

Delves into practical and advanced topics, beginning with file handling for data backup & recovery, including reading, writing, and managing CSV files. Introduces data visualization techniques using Matplotlib to create & customize various plots. This module also covers building graphical user interfaces with Tkinter, drawing shapes and animations with the Turtle module, and exploring data science concepts with Pandas for data analysis and basic statistics. Each lesson is supplemented with assignments, quizzes, and programming exercises to enhance learning.

### LESSON 1

#### File Handling

Overview and Importance of file handling, File Objects: Opening a File: open(), Closing a File: close(), Modes of file opening, Reading from Files and Writing to Files: read(), readline(), readlines(), write(), File pointer: seek(), Using try and except blocks to handle file-related exceptions, Working with CSV files



Assignment-1  
10 questions



Quiz-1  
10 Questions

### LESSON 2

#### Data Visualization Techniques

Introduction to Matplotlib, Collecting and organizing data: surveys, polls, and experiments, Installing and setting up Matplotlib, Creating simple plots using Matplotlib: line plots, bar plots, and scatter plots, Customizing Plots: colors, markers, labels, and titles.



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+10

### LESSON 3

#### Python GUI

Overview of Tkinter, Installing Tkinter, Create First GUI Application using Python-Tkinter, Basic Widgets: Add image, RadioButton, Checkbutton, Canvas Widget, Menubutton, Progressbar, Text ..ect, Creating simple animations (e.g., bouncing ball, moving car), widget appearance (e.g., colors, fonts), Understanding layout: pack, grid, place



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+10

### LESSON 4

#### Drawing with Turtles

Understanding the Turtle window and canvas, Basic commands: forward(), backward(), left(), right(), penup(), pendown(), reset(), Drawing simple shapes: lines, squares, rectangles, circles, Exploring movement commands: forward(), backward(), left(), right(), begin\_fill() and end\_fill() functions, pensize()



Assignment-1  
10 questions



Quiz-1  
10 Questions



Program  
+10

### LESSON 5

#### The world of DataScience

What is data?, Introduction to Pandas, Installing Pandas, Data Cleaning, Analyzing Data, CSV files, DataFrame, Computing basic statistics (mean, median, mode, etc.), Data Filtering, Introduction to Machine Learning, Database Management System.



Assignment-1  
10 questions



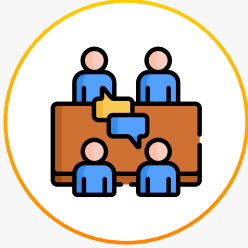
Quiz-1  
10 Questions



Program  
+20



# Top 8 Benefits of Learning at Mynsha



## Regular PTM

Great opportunity for parents and teachers to open two-way communication and to share insights for the holistic development of the Child.



## Regular Doubt Sessions

After every module solve all your queries in this personalized session. The toughest problems addressed-concepts revised and doubts cleared.



## Engaging Quizzes

Quizzes are fun and help us remember important facts. These well-targeted and tailor-made quizzes will boost self-esteem and confidence in kids.



## Thrilling Competitions

Regular competitions are conducted to encourage students to showcase their skills and develop their ideas.



## Learning Certificates

Show the world what you can do with a certificate for every amazing skill you master.



## Live Personalized Classes

Understand concepts faster with personal attention from teachers. Learn coding from highly qualified teachers trained to make learning effective.



## Lifetime Access to Class Videos

Forgot what was taught in the last class? No worries, watch the recorded class video anytime to refresh your memory.



## Gamified Learning

Mynsha makes learning fun with gamification. Students can take quizzes or complete projects to earn points, badges and rewards.

is your child ready  
for the future?



Start your kid's Coding Journey  
with Mynsha today.

**THANK YOU**

Got Questions?  
Contact us  
anytime.

Drop us your message

✉ [info@mynsha.com](mailto:info@mynsha.com)



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