

# ADVANCE CERTIFICATE COURSE IN PYTHON





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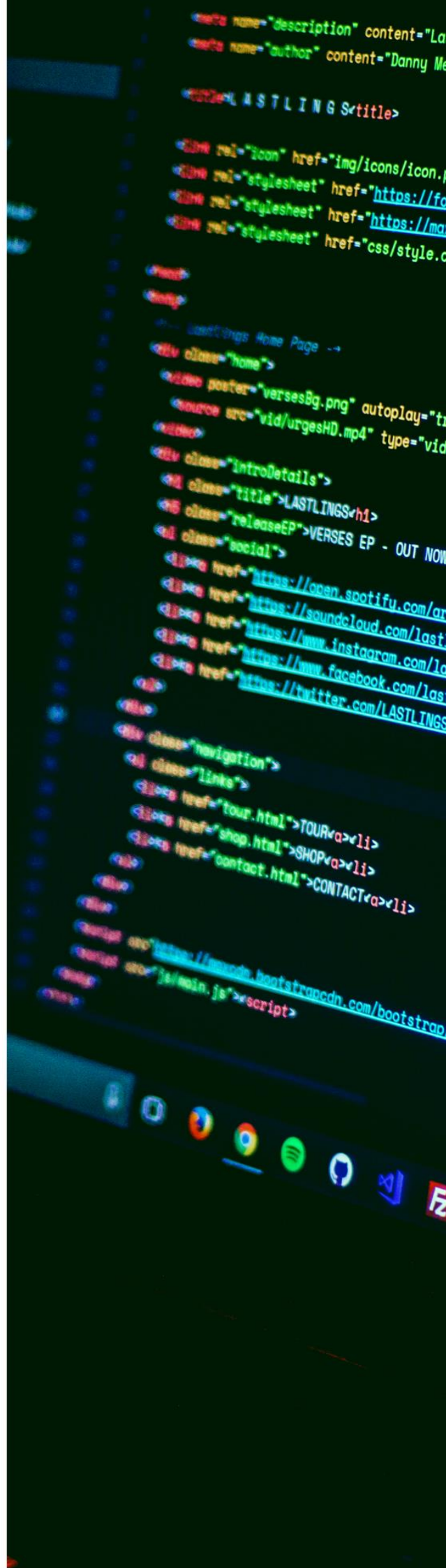
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# About Glister Eduversity

Today is the era of working parents and due to workload, they do not get enough time to support their children's education. Therefore, they are heavily blamed by all, in the current dialogue and debate about improving the education system, the disadvantages of improper parenting is known to all.

It is time to start parenting in the education system. With the Glister Eduversity, we present you the solution to all such problems switching towards telephonic parenting, proper guidance and development graph.

This is the first Indian institution to provide education care with parenting. Glister Education offers telephonic parenting with right strategic plans for the student, online test series, seminar, scholarship programs, in really attractive packages.

We also guide their appointments as well as their strategies. So, let's don't wait, and achieve nothing less than success with Glister Eduversity Parenting cum Education Care.



Director: Amit Pandey

## Mission

The mission of Glister Eduversity is to educate the citizens and citizen-leaders for our society.

We do this through our commitment to the transformative power of a liberal arts and sciences education.

Beginning in the classroom with exposure to new ideas, new ways of understanding, and new ways of knowing, students embark on a journey of intellectual transformation.

Through a diverse living environment, where students live with people who are studying different topics, who come from different walks of life and have evolving identities, intellectual transformation is deepened and conditions for social transformation are created.

From this we hope that students will begin to fashion their lives by gaining a sense of what they want to do with their gifts and talents, assessing their values and interests, and learning how they can best serve the world.

## Vision

Glister Eduversity will set the standard for residential liberal arts and sciences education in the twenty-first century. We are committed to creating and sustaining the conditions that enable all Glister Eduversity students to experience an unparalleled educational journey that is intellectually, socially, and personally transformative.

Welcome to the Glister Eduversity, Varanasi. For more than three years, Glister Eduversity has served as our nation's flagship comprehensive institution of higher education.

Our primary goal is to become one of the most prominent and excellent educational institutes in the world. We are fortunate to have a talented, highly committed teaching and support staff here to ensure the learning environment of our students is the best it can be. Our faculties are renowned scholars and accomplished practitioners who are actively engaged in the academic excellence and innovative research ideas of the modern world. Our students are innovators, engineers, managers, great scientists, entrepreneurs, and aspiring leaders - from every age group and are located at every corner of the country. Our unique teaching and learning process with a proper blend of theory and practice crosses the boundaries of nations towards industry-readiness and global excellence.

## **P**rogram overview

Glister Eduversity Advance Certificate in Python Course will enable you to learn important Python programming concepts such as data operations, file operations, object-oriented programming and various Python libraries essential for Data Science. This course is designed to teach you the foundations in order to write simple programs in Python using the most common structures. No previous exposure to programming is needed. By the end of this course, you'll understand the benefits of programming in IT roles; be able to write simple programs using Python; figure out how the building blocks of programming fit together; and combine all of this knowledge to solve a complex programming problem.

### Salient Features



Python is a general-purpose programming language; that is, you can use it to write codes for a Wide variety of application fields.



Python is used to build web apps, desktop apps, perform some scientific computations.



This Course is specifically designed for those candidates who are already familiar with Programming and Python. Students after completing this course can become Data scientist and web developer.



The modules of this Course is prepared related to the IT Applications syllabus at the advanced Diploma level with a view to preparing software professionals for supplying to the IT and Software Industry.





# Course Objective

The 6 Months “Advance Certificate Course in Python” is for the Learners who want to be a Python Programming Expert, with the aim to learn, develop and practice required by the market. In this course, the emphasis is put on the learner to acquire the ability to perform as a confident and competent Python Expert.

## The objectives of this course are to:

Advance Certificate in Python is a course designed to prepare candidates in such a way that it can present and able to work in the world of Programming. You will learn to Install Python and write your first program and describe the basics of the Python programming language. You will also Use variables to store, retrieve and calculate information. You will learn to utilize core programming tools such as functions and loops.

## Learning Outcome:

- Understand what Python is and why Python is relevant to automation
- Write short Python scripts to perform automated actions
- Understand how to use the basic Python structures: strings, lists, and dictionaries
- Create your own Python objects



# Details of Programme: Advance Certification in Python

## 1. Title of the Course

The Course shall be called as "Certificate Course in Computer Application ", a Regular course of 6 months (240 hrs.) Duration.

## 2. Duration of the Course

This is a regular course of 240 hrs. Extended over a period of 6 months duration.

## 3. What You Will Get:

You Will Get a Mark sheet and a Certificate That Will be Universally Acceptable.

## 4. Aims and Objectives of the Course

Certificate in Python is a course designed to prepare candidates in such a way that it can present and able to work in the world of Programming

## 5. SCOPE:

IT Engineer, web Developer, Software Developer, Programmer, Office Executive, DTP Operator etc.

## 6. Syllabus

The syllabus is design to fulfill aforesaid objectives containing theory subjects as well as practical in Python.

Introduction to Python and Computer Programming	Theory : 50 Marks, Practical/Assignment : 50 Marks
Data Types, Variables, Basic Input-Output Operations, Basic Operators	Theory : 50 Marks, Practical/Assignment : 50 Marks
Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operations	Theory : 50 Marks, Practical/Assignment : 50 Marks
Functions, Tuples, Dictionaries, and Data Processing	Theory : 50 Marks, Practical/Assignment : 50 Marks
Modules, Packages, String and List Methods, and Exceptions	Theory : 50 Marks, Practical/Assignment : 50 Marks
The Object-Oriented Approach: Classes, Methods, Objects, and the Standard Objective Features; Exception Handling, and Working with Files	Theory : 50 Marks, Practical/Assignment : 50 Marks

## 7. Eligibility Conditions

A candidate who has passed at least 12th examination from a recognized Board or its equivalent shall be eligible to take admission to the course.

## 8. Course Fee: INR 7500+GST/-

# Content of Syllabus :

## Unit 1:- Introduction to Python and Computer Programming

Introduction to Python and Computer Programming

## Unit 2:- Data Types, Variables, Basic Input-Output Operations, Basic Operators

Data Types, Variables, Basic Input-Output Operations, Basic Operators

## Unit 3:- Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operations

Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operations

## Unit 4:- Functions, Tuples, Dictionaries, and Data Processing

Functions, Tuples, Dictionaries, and Data Processing

## Unit 5:- Modules, Packages, String and List Methods, and Exceptions

Modules, Packages, String and List Methods, and Exceptions

## Unit 6:- The Object-Oriented Approach: Classes, Methods, Objects, and the Standard Objective Features; Exception Handling, and Working with Files

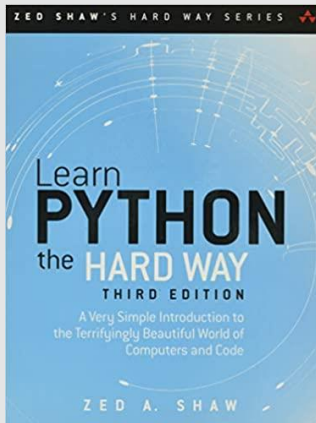
The Object-Oriented Approach: Classes, Methods, Objects, and the Standard Objective Features; Exception Handling, and Working with Files

```
744     quotes['sort_order'],
745     error' => quote['error']
746   }
747 }
748
749 $sort_order = array();
750
751 foreach ($quotes as $key => $value) {
752     $sort_order[$key] = $value['sort_order'];
753 }
754
755 array_multisort($sort_order, SORT_ASC, $quotes);
756
757 $this->session->data['lpa']['shipping_methods'] = $quotes;
758 $this->session->data['lpa']['address'] = $address;
759
760 if (empty($quotes)) {
761     $json['error'] = $this->language->get('
762         error_no_shipping_methods');
763 } else {
764     $json['quotes'] = $quotes;
765 }
766
767 if (isset($this->session->data['lpa']['shipping_method']) &&
768     empty($this->session->data['lpa']['shipping_method']) &&
769     isset($this->session->data['lpa']['shipping_method']['code']
770 )) {
771     $json['selected'] = $this->session->data['lpa']['
772         shipping_method']['code'];
773 } else {
774     $json['selected'] = '';
775 }
776 } else {
777     $json['error'] = $this->language->get('error_shipping_methods');
778 }
779 }
780
781 $this->response->setHeader('Content-Type: application/json');
```

```
381     $this->paused = true;
382     $this->cycle(true);
383 }
384
385 if (this.$element.find('.next, .prev').length && $.support.transition) {
386     this.$element.trigger($.support.transition.end)
387     this.cycle(true);
388 }
389
390 this.interval = clearInterval(this.interval);
391
392 return this;
393 }
394
395 Carousel.prototype.next = function () {
396     if (this.sliding) return;
397     return this.slide('next');
398 }
399
400 Carousel.prototype.prev = function () {
401     if (this.sliding) return;
402     return this.slide('prev');
403 }
404
405 Carousel.prototype.slide = function (type, next) {
406     var $active = this.$element.find('.item.active')
407     var $next = next || this.getActiveForDirection(type, $active)
408     var isCycling = !!this.interval
409     var direction = type == 'next' ? 'left' : 'right'
410     var fallback = type == 'next' ? 'first' : 'last'
411     var that = this
412
413     if (!$next.length) {
414         if (!this.options.wrap) return;
415         $next = this.$element.find('.item')[fallback];
416     }
417
418     if (!$next.hasClass('active')) return (this.sliding = false)
419
420     var relatedTarget = $next[0]
421     var slideEvent = $.Event('slide.bs.carousel', {
422         relatedTarget: relatedTarget,
423         direction: direction
424     })
425     this.$element.trigger(slideEvent);
426     if (slideEvent.isDefaultPrevented()) return;
427
428     this.pause();
429     this.$element.removeClass('carousel');
430     this.$element.addClass('carousel-sliding');
431     this.$active.removeClass('active');
432     $next.addClass('active');
433     this.cycle(true);
434     this.trigger($.support.transition.end);
435     this.sliding = false;
436 }
```

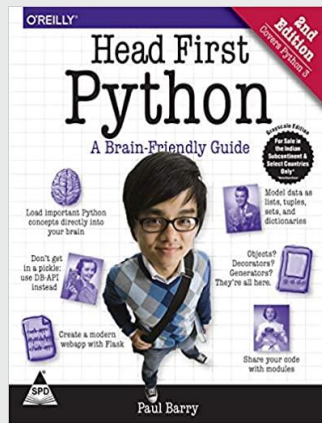


# Books For Reference



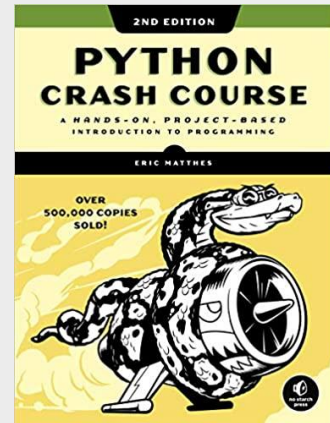
Learn Python the Hard Way

Zed Shaw



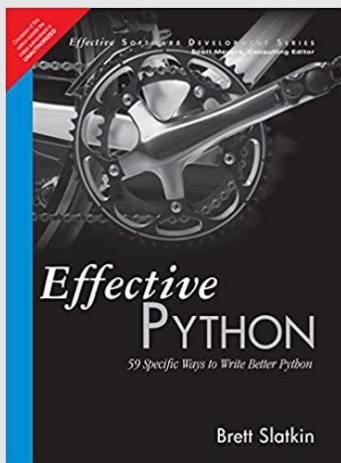
Head First Python

Paul Barry

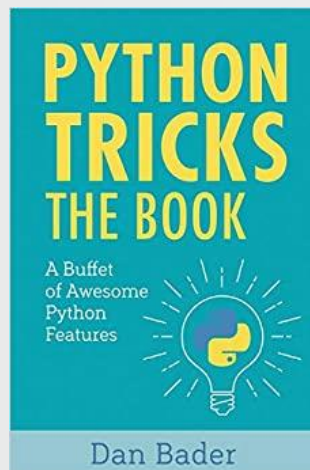


Python Crash Course

Eric Matthes



Effective Python  
Brett Slatkin



Python Tricks  
Dan Bader