

SNS COLLEGE OF TECHNOLOGY

Kurumbapalayam (Po), Coimbatore – 641 035

An Autonomous Institution

Accredited by NAAC – UGC with ‘A++’ Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**COURSE NAME: 23ITO201- Software Testing
(OPEN ELECTIVE)**

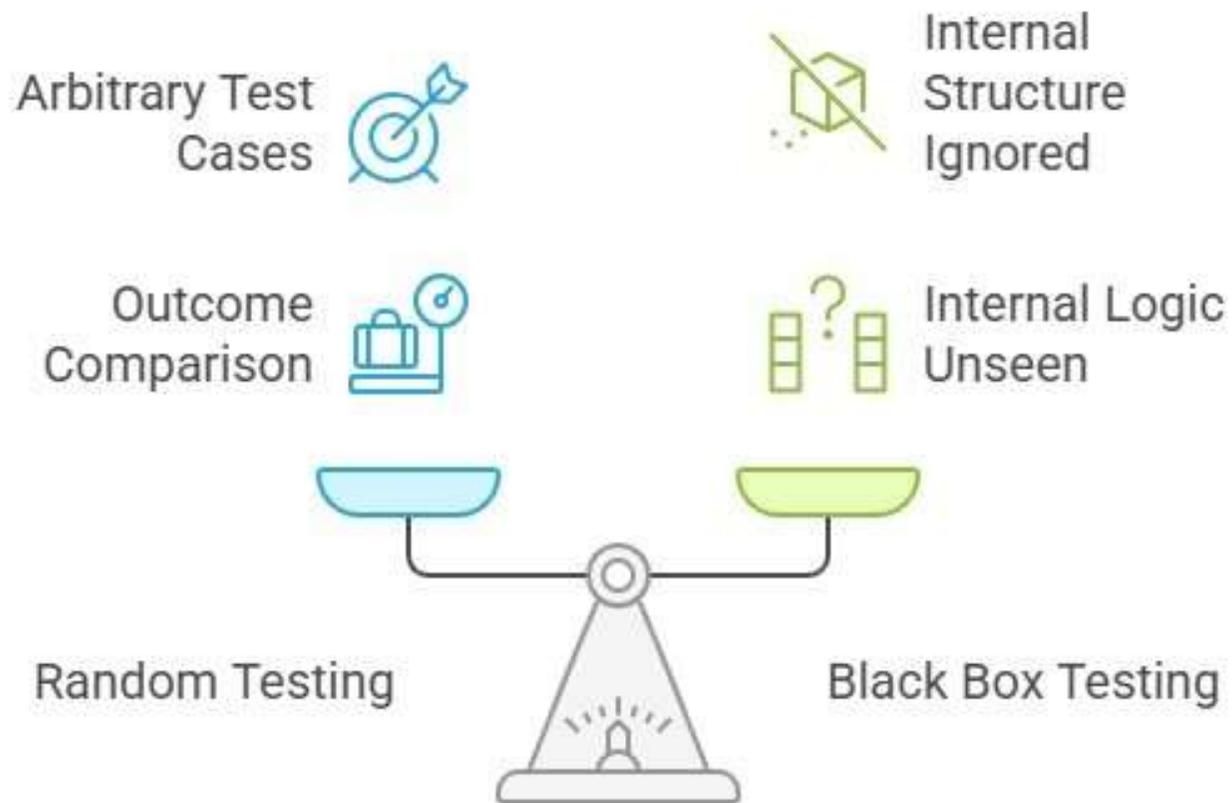
III YEAR / VI SEMESTER

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Unit 2 - TEST CASE DESIGN STRATEGIES

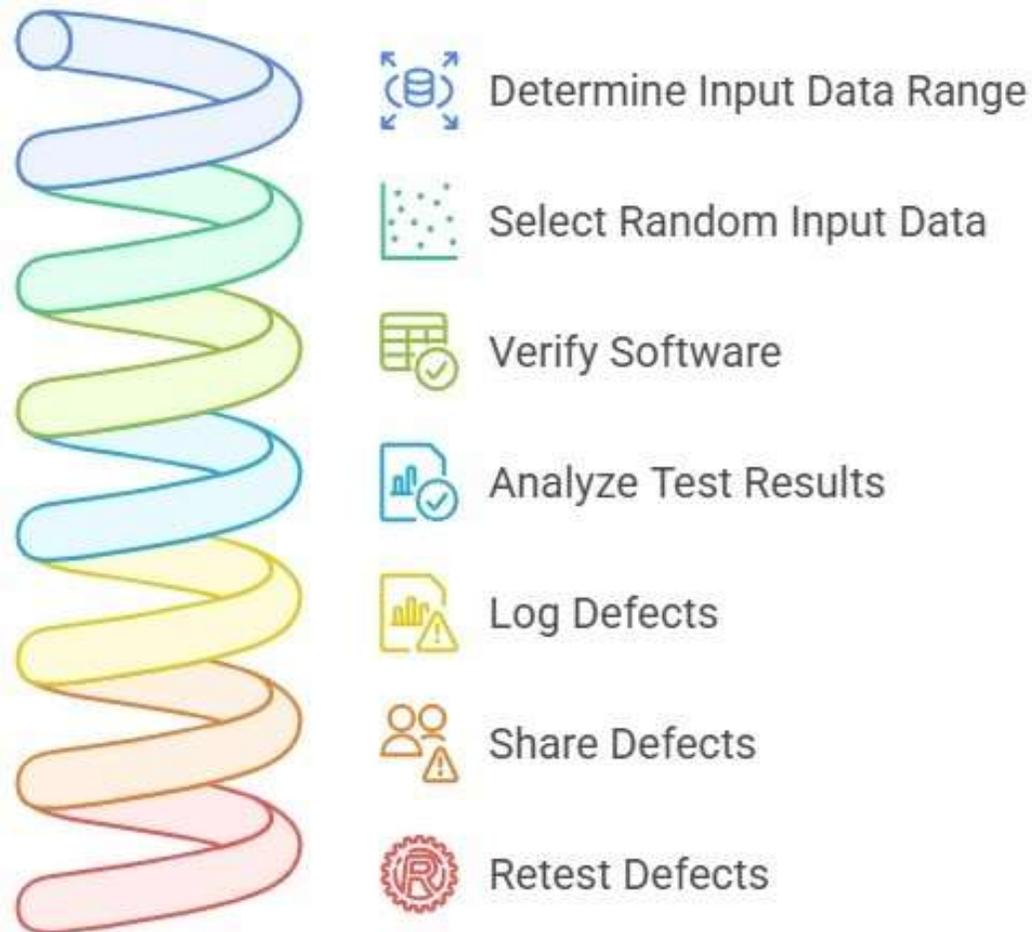
Topic : RANDOM TESTING

Random Testing: Arbitrary Cases, Outcome Comparison



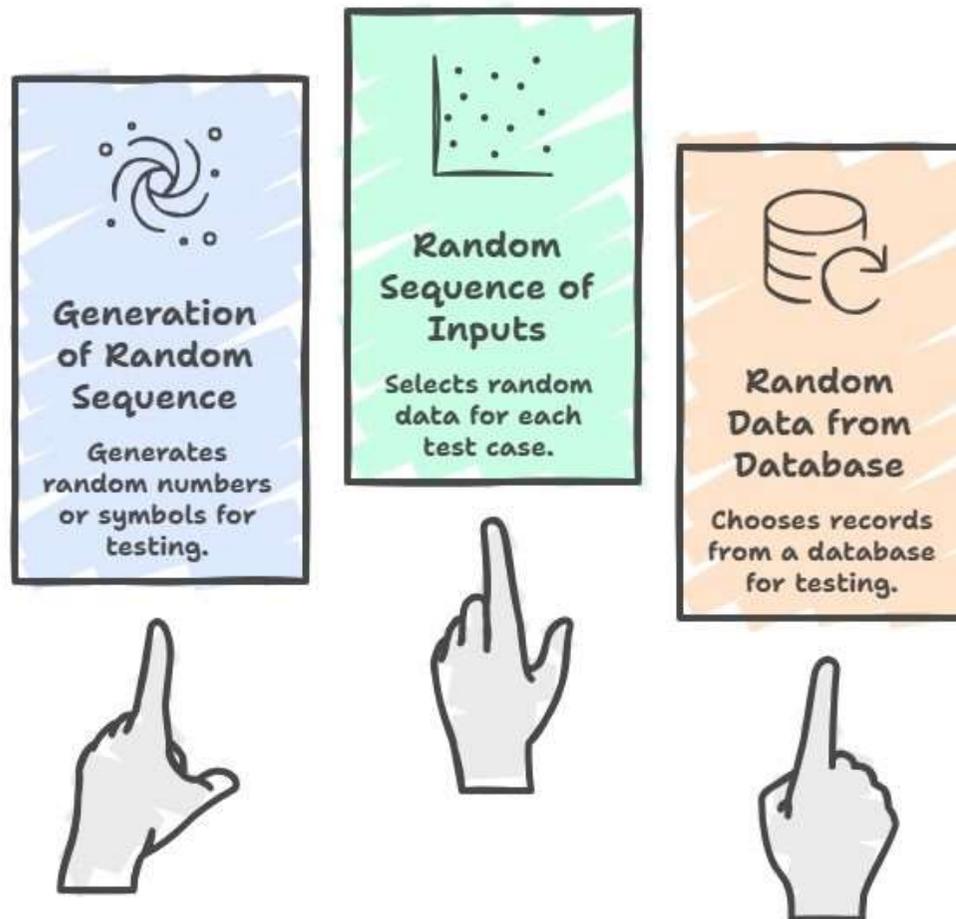
Define - Software Random Testing

Software Random Testing Process



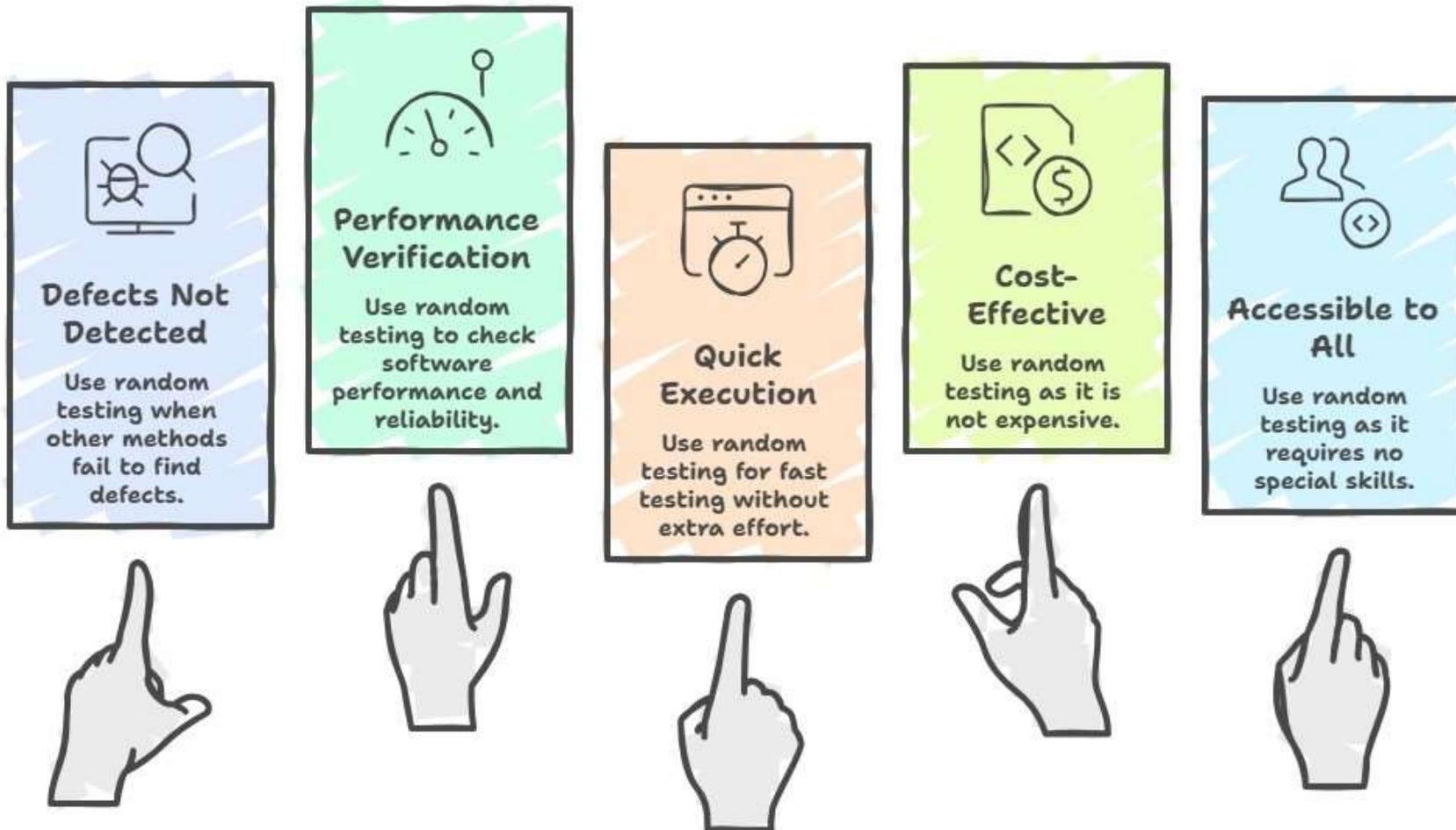
Types of Software Random Testing

Which type of random testing should be used?



Characteristics of Software Random Testing

Should random testing be used?



Methods used in Software Random Testing

Software Random Testing Cycle



Activity

Sample Random Test Cases Table

Test Case ID	Username (Random)	Password (Random)	Expected Result	Actual Result	Status
TC01	@#45ab	123	Error Message		
TC02	abcdefghijkl	pass@12345	Accept/Login		
TC03	(blank)	random123	Validation Error		
TC04	user!@#	\$\$\$\$\$\$\$\$	Error		
TC05	98765	abcd1234	Accept/Login	7	

Step-by-Step Instructions:

Step 1: Form Groups

- Divide students into 4–5 groups
- Each group acts as a testing team

Step 2: Provide Sample Application (Assume)

Login Form Fields:

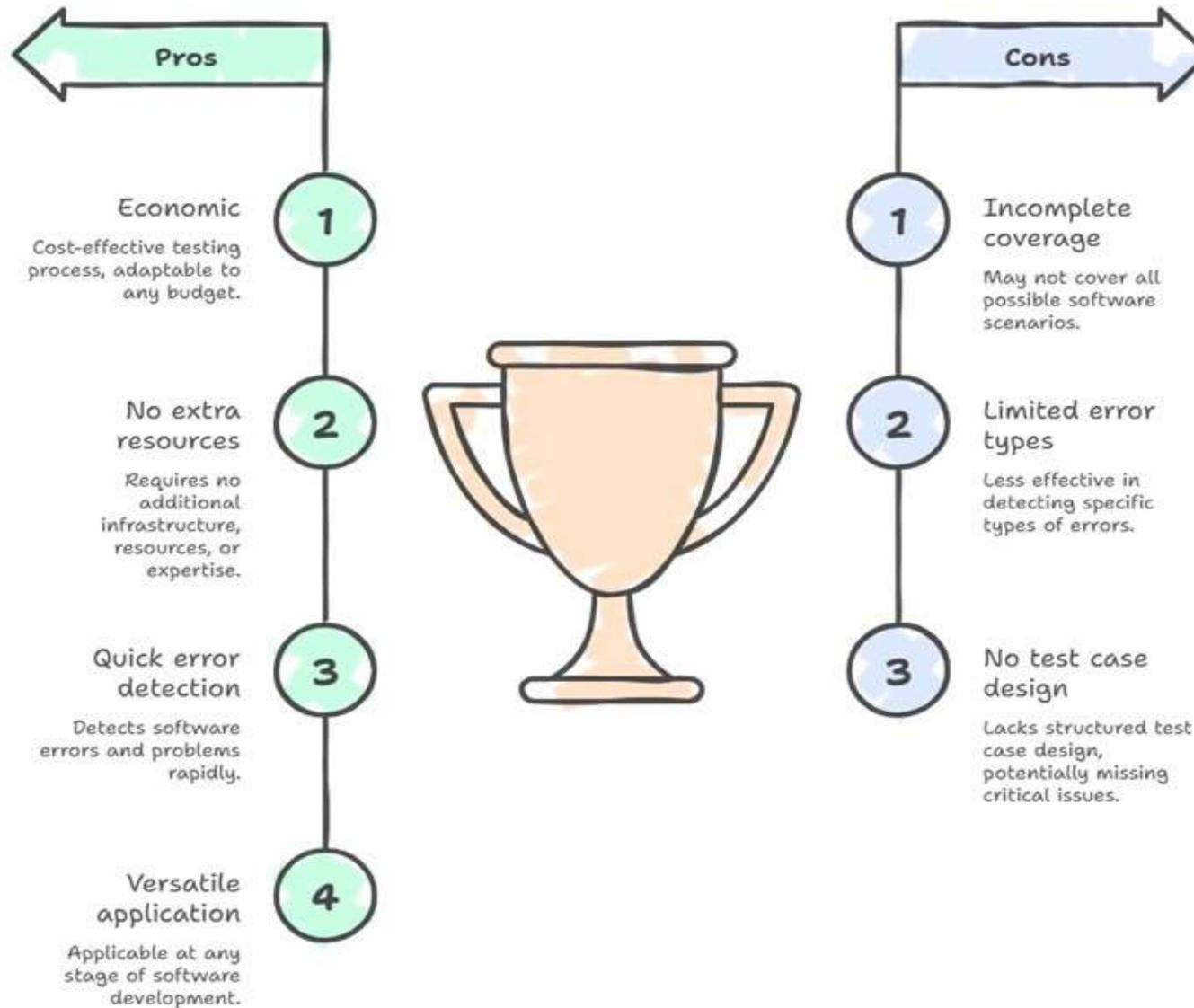
- Username
- Password
- Submit Button

Step 3: Generate Random Test Data

Students must create random inputs such as:

- Random alphabets
- Special characters
- Numbers
- Blank inputs
- Long strings
- Mixed characters

Software Random Testing



MCQ

MCQ – Random Testing (Software Testing)

1. What is Random Testing?

- a) Testing using only valid inputs
- b) Testing with predefined test cases
- c) Testing by generating random inputs
- d) Testing only UI components

Answer: c) Testing by generating random inputs

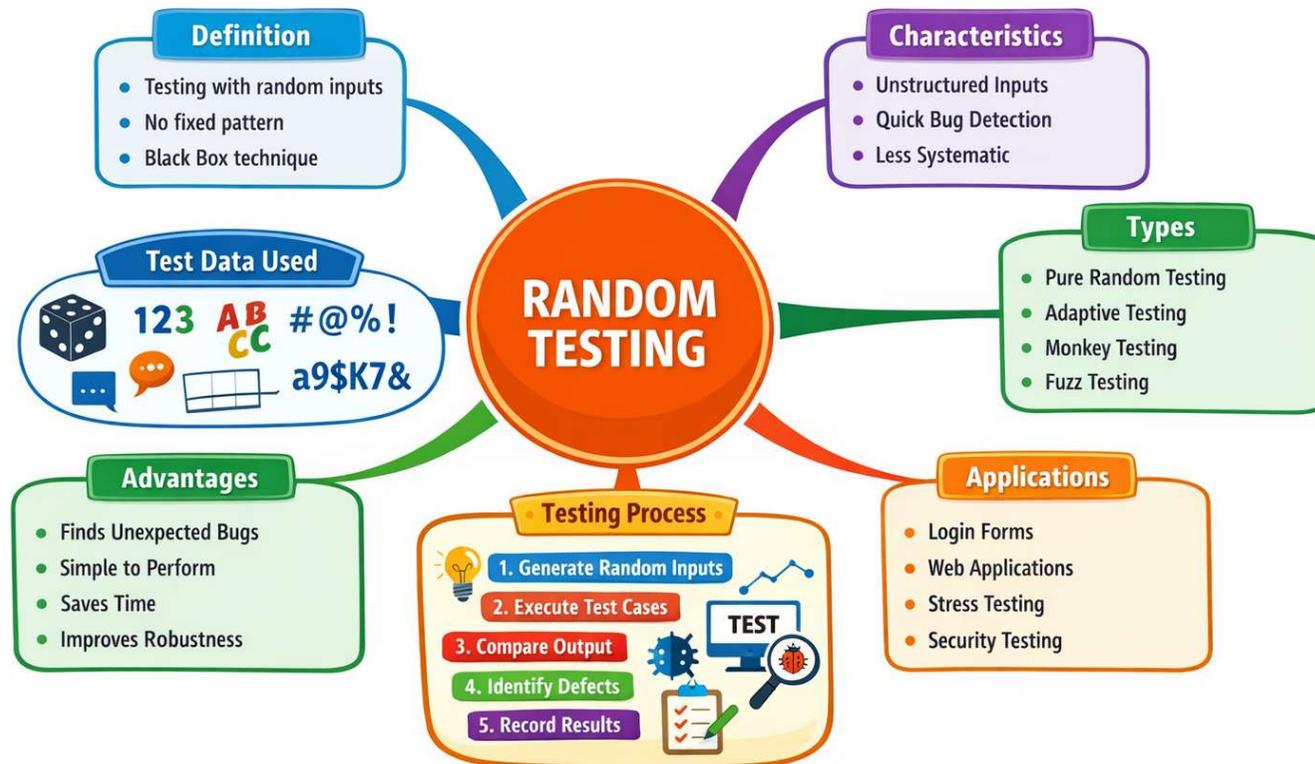
2. Random Testing is mainly used to:

- a) Improve UI design
- b) Find unexpected defects
- c) Reduce coding errors only
- d) Replace all testing methods

Answer: b) Find unexpected defects

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Mind Map



TEXT BOOKS	
1.	Srinivasan Desikan and Gopaldaswamy Ramesh, —Software Testing – Principles and Practices, Pearson Education, 2006.
REFERENCES	
1.	Ilene Burnstein, —Practical Software Testing, Springer International Edition, 2003
2.	Edward Kit, Software Testing in the Real World – Improving the Process, Pearson Education, 1995
3.	Boris Beizer, Software Testing Techniques – 2nd Edition, Van Nostrand Reinhold, New York, 1990.
4.	Aditya P. Mathur, —Foundations of Software Testing _ Fundamental Algorithms and Techniques, Dorling Kindersley (India) Pvt. Ltd., Pearson Education, 2008.



Thank You

