

DAY	SYLLABUS TOPICS	REFERENCE AND TASKS
1	<p>Introduction to dart Install Dart SDK Dart pad</p> <p>What is dart? Features of dart Difference between dart and flutter. Dart Keywords, Identifiers Variables</p> <ul style="list-style-type: none"> ○ dynamic ○ var <p>Dart Data Types</p> <ul style="list-style-type: none"> ○ Number ○ Strings ○ Boolean ○ Lists ○ Maps ○ sets ○ Runes ○ Symbols ○ Enumeration (enum) <p>Dart Constants</p> <ul style="list-style-type: none"> ○ Final ○ Const <p>Dart Operators</p> <ul style="list-style-type: none"> • Arithmetic Operators • Increment and Decrement Operators • Assignment Operators • Logical Operators • Type Test Operators <p>User Input in dart</p>	<p>https://dart-tutorial.com/</p> <p>Practice the topics mentioned.</p> <p>Write Program to Swap Values of Three variables like that. Input: (x = 3, y = 4, z = 5) Output: (x = 4, y = 5, z=3)</p> <p>Write a Dart program which accepts the user's first and last name and print them in reverse order with a space between them, e.g.: Anna Rose</p> <p>Ans = Rose Anna</p> <p>https://youtu.be/w_yY7xyCaUE</p>

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2	<p>Control Flow Statements</p> <p><u>Decision-making statements</u></p> <ul style="list-style-type: none"> • If • If-else • If else if Statement • Switch Case Statement • Ternary Operator <p><u>Looping statements</u></p> <ul style="list-style-type: none"> • for loop • for....in loop • for each • while loop • do while loop <p><u>Jump statements</u></p> <ul style="list-style-type: none"> • break Statement • Continue Statement <p>Assert in dart</p> <p>Exception Handling in dart</p>	<p>Program to print patterns: star, numbers, character.</p> <p>Write a dart program to generate multiplication tables of 1-9.</p> <p>Write a dart program to create a simple calculator that performs addition, subtraction, multiplication, and division.</p> <p>Write a dart program to print 1 to 100 but not 41.</p>

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3	<p>String Methods and Properties</p> <p>List Methods and Properties</p> <p>PROPERTIES</p> <ul style="list-style-type: none"> • first • isEmpty • isNotEmpty • iterator • last • length • reversed • single <p>METHODS</p> <ul style="list-style-type: none"> • add • addAll • clear • contains • elementAt • firstWhere • fold • forEach • map • reduce • toList • toSet • where 	<p>String class - dart:core library - Dart API</p> <p>https://api.dart.dev/stable/1.10.1/dart-core/List-class.html</p>

4	<p>Map Methods and Properties</p> <p><u>Properties</u></p> <p>keys values length isEmpty isNotEmpty</p> <p><u>Methods</u></p> <p>addAll () remove () foreach () clear ()</p> <p>Set Methods and Properties Set Operations</p>	<p>Dart Map - Javatpoint</p> <p>Set class - dart:core library - Dart API</p> <p>Refer all methods and properties of list, set, map and strings beyond the given topics and workout programs.</p>
5	<p>Functions</p> <p>Types of parameters (very important)</p> <ul style="list-style-type: none"> Required Parameters Optional Parameters Named Parameters <p><u>Anonymous functions</u></p> <p>Arrow functions</p>	<p>https://youtu.be/EBu3pl_desA</p> <p>https://youtu.be/TnOuPIQRa0Y</p> <p>Write Program to Calculate Area of Circle.</p> <p>Write Program to Calculate Area of Square.</p> <p>Write Program to Calculate Area of Rectangle</p>

6	<p>Practice basic problems basic using Dart</p> <p>Complete pending tasks and learn more about dart.</p>	<ol style="list-style-type: none"> 1. Program to generate Fibonacci sequence. <ul style="list-style-type: none"> • Fibonacci program using loop. • Fibonacci program using recursion. 2. Program to convert character & string to ASCII value (Code Units). 3. Program to check if number or string is palindrome or not 4. Program to generate random number bool, int, double. 5. Program to check if a given number is Armstrong or not. 6. Program to check if a give number is prime or not. 7. Program to check if a given number is spy number or not.
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