

Data Structures



Dict

Meaning



Alpha



Random

Data loss ✗



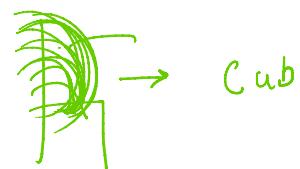
→ Structure the Data



• Organize, Store ✓ -

• Process ✓

• Retrieve ✓



name = Virat Kohli

age =

run_1 = 72
run_2 = 34
run_3 = 75

:

[370]

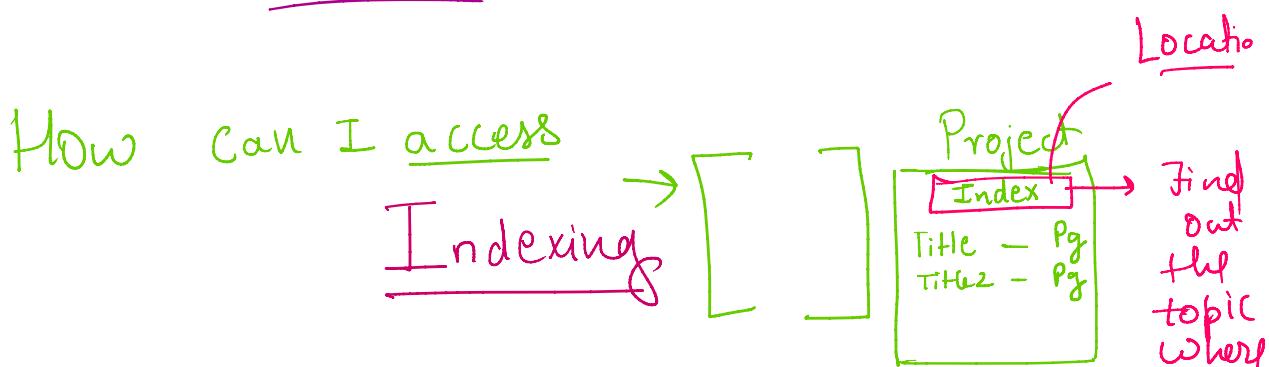
$$\text{runs_virat} = [73, 34, 21, 18, \dots, 40]$$

List → []

→ comma separated

→ order → you provide

→ no limit



$$\text{runs_virat} = [67, 32, 41, 92, 73, 21]$$

Indexing starts from 0

$\text{runs_virat}[1]$
Ans - 32

↳ $\text{runs_virat}[2]$
41

More more Matched

How many Matched

Total elements in list

$\text{len}(\text{runs_virat})$
↳ 6

→ How I get Virat last match score

$$\text{runs_virat} = [67, 32, \boxed{41}, 92, 73, 21]$$

→ $\{ \text{runs_virat} [\text{len}(\text{runs_virat}) - 1]$
 \downarrow
 $[\quad 5 \quad]$

Negative Indexing

$$\text{runs_virat} = [67, 32, \boxed{41}, 92, 73, 21]$$

Negative → starts -1

Negative \rightarrow runs - 1

runs-virat [-1]

$\hookrightarrow [21]$

runs-virat [-5]

$\hookrightarrow [32]$

small

runs-virat = $[67, 32, 41, 92, 73, 21]_{-1}$

runs-virat $\left[- \underbrace{\text{len}(\text{runs-virat})}_{-6} \right]$

\downarrow
- 6
 \searrow
67

+ Print the total of runs on odd

Position \leftarrow

runs-virat = $[67, 32, 41, 92, 73, 21]_{0 1 2 3 4 5}$

runs-virat[0] + runs-virat[2] + runs-virat[4]

→ List → Method
function

$\text{runs_virat} = [67, 32, \boxed{41}, \underline{92}, \underline{73}, 21]$

→ $\text{runs_virat} \cdot \underline{\text{append}}(26)$
 $[67, 32, 41, 92, 73, 21, 26]$

↑
add
More
runs

end
of
the
list

{ def square(n)
 return n^2 } Task

{ def append } It is
only made
for list

$\text{runs_virat} = [67, 32, \boxed{41}, \underline{92}, \underline{73}, 21]$

Insert \circ at particular loc.
 $[67, \boxed{\text{New}}, 32, 41, 92, 73, 21]$

$\text{runs_virat.insert}(1, \underline{100})$
 runs-virat.insert(1, 100)

$\boxed{[67, \text{New}, 32, 41, 92, 73, 2]} \rightarrow [67, 100, 32, 41, 92, 73, 2]$

$\text{runs_virat.insert}(0, 25)$
 runs-virat.insert(0, 25)

$[25, 67, 100, 32, 41, 92, 73, 2]$

$\rightarrow [32, 99, 21]$
 runs-virat.extend([32, 99, 21])

Multiple Values
but only at the end

$() [25, 67, 100, 99, 21, 32, 99, 21]$

\rightarrow Iterating List
 for i in range(5):
 Print(i)

iterable object
 $0, 1, 2, 3, 4$



List is also iterable

[26, 34, 29]

for i in [34, 75, 21, 99, 45]
Print(i)

34
75
21
99
45