

## JavaScript Algorithm 2

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The screenshot shows the Coding Dojo interface for Level 2 Challenge 1. The left sidebar lists the lesson progress, with Level 2 (1/13) highlighted. The main area displays the challenge code and a T Diagram.

**Level 2 Challenge 1**

Predict the output of the following code:

```
1 var x = [1,2,4];
2 console.log(x);
```

**T Diagram**

Variable	Values
x	[1,2,4]
a,b,c	1,2,3

Below the code, the user has entered the output `[1,2,4]` and clicked the **SUBMIT** button. A green message box says: "Hey, you got it right! Wanna see how we did it?". A **NEXT ACTIVITY** button is also visible.

The screenshot shows the Coding Dojo interface for Level 2 Challenge 2. The left sidebar lists the lesson progress, with Level 2 (2/13) highlighted. The main area displays the challenge code and a T Diagram.

**Level 2 Challenge 2**

Predict the output of the following code:

```
1 var x = [1,3,5];
2 console.log(x[0]);
```

**T Diagram**

Variable	Values
x	1,3,5
a,b,c	1,2,3

Below the code, the user has entered the output `1` and clicked the **SUBMIT** button. A green message box says: "Hey, you got it right! Wanna see how we did it?". A **NEXT ACTIVITY** button is also visible.

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LESSONS 8%CHALLENGES 0%ASSESSMENT

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Introduction

Level 1 (5/5)

Level 2 (3/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4

Activity 5

Activity 6

Activity 7

Activity 8

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 3

Predict the output of the following code:

1

var x = [2,4,6];

2

console.log(x[1]);

4

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	2,4,6
a,b,c	1,2,3

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Introduction

Level 1 (5/5)

Level 2 (4/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4 00:18

Activity 5

Activity 6

Activity 7

Activity 8

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 4

Predict the output of the following code:

1

var x = [1,3,5];

2

console.log(x[2]);

5

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1,3,5
a,b,c	1,2,3

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CODING DOJO

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Introduction

Level 1 (5/5)

Level 2 (5/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4 00:18

Activity 5 00:25

Activity 6

Activity 7

Activity 8

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 5

Predict the output of the following code:

1

var x = [1.3];

2

console.log(x[0]);

1.3

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1.3
a,b,c	1,2,3

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CODING DOJO

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Lessons 8%

Introduction

Level 1 (5/5)

Level 2 (6/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4 00:18

Activity 5 00:25

Activity 6 07:39

Activity 7

Activity 8

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 6

Predict the output of the following code:

1

var x = [1,2,4];

2

x[0] = x[1];

3

console.log(x);

[2,2,4]

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	[1,2,4]
x	[2,2,4]
a,b,c	1,2,3

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CODING DOJO

LESSONS 8%CHALLENGES 0%ASSESSMENT

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Lessons 8%

Introduction

Level 1 (5/5)

Level 2 (7/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4 00:18

Activity 5 00:25

Activity 6 07:39

Activity 7 00:50

Activity 8

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 7

Download this video

Predict the output of the following code:

1

var x = [1,3,5];

2

var y = x.length;

3

console.log(y);

3

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1,3,5
y	3
a,b,c	1,2,3

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CODING DOJO

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Introduction

Level 1 (5/5)

Level 2 (8/13)

Activity 1 00:45

Activity 2 00:35

Activity 3 00:21

Activity 4 00:18

Activity 5 00:25

Activity 6 07:39

Activity 7 00:50

Activity 8 02:44

Activity 9

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2 Challenge 8

Download this video

Predict the output of the following code:

1

var x = [2,4,6,3,7];

2

var y = x.length - 2;

3

console.log(x[y]);

3

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	2,4,6,3,7
y	3
a,b,c	1,2,3

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Introduction

Level 1 (5/5)

Level 2 (9/13)

Activity 100:45

Activity 200:35

Activity 300:21

Activity 400:18

Activity 500:25

Activity 607:39

Activity 700:50

Activity 802:44

Activity 905:34

Activity 10

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2Challenge 9

Download this video

Predict the output of the following code:

1

var x = [2,4,6,3,7];

2

var y = x.length;

3

console.log(x[y-1]);

T Diagram

Variable	Values
x	2,4,6,3,7
y	5
a,b,c	1,2,3

7

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

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Lessons8%

Introduction

Level 1 (5/5)

Level 2 (10/13)

Activity 100:45

Activity 200:35

Activity 300:21

Activity 400:18

Activity 500:25

Activity 607:39

Activity 700:50

Activity 802:44

Activity 905:34

Activity 1002:45

Activity 11

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2Challenge 10

Download this video

Predict the output of the following code:

1

var x = [1,3,5,7];

2

x[0] = x[x.length-2];

3

console.log(x);

T Diagram

Variable	Values
x	1,3,5,7
x	5,3,5,7
a,b,c	1,2,3

[5,3,5,7]

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

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CODING DOJO

LESSONS 8%CHALLENGES 0%ASSESSMENT

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Lessons8%

Introduction

Level 1 (5/5)

Level 2 (11/13)

Activity 100:45

Activity 200:35

Activity 300:21

Activity 400:18

Activity 500:25

Activity 607:39

Activity 700:50

Activity 802:44

Activity 905:34

Activity 1002:45

Activity 1105:02

Activity 12

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2Challenge 11

Predict the output of the following code:

1var x = [1,3,5,7];

2x[x.length-3] = x[x.length/2+x.length/4];

3console.log(x);

[1,7,5,7]

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1,3,5,7
x	1,7,5,7
a,b,c	1,2,3

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CODING DOJO

LESSONS 8%CHALLENGES 0%ASSESSMENT

Marc James Montero

Lessons8%

Introduction

Level 1 (5/5)

Level 2 (12/13)

Activity 100:45

Activity 200:35

Activity 300:21

Activity 400:18

Activity 500:25

Activity 607:39

Activity 700:50

Activity 802:44

Activity 905:34

Activity 1002:45

Activity 1105:02

Activity 1211:22

Activity 13

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2Challenge 12

Predict the output of the following code:

1var x = [1,3,5,7];

2var y = [2,4,6];

3x[2] = y[x.length-3];

x[2] = y[1]

x[2] = 4

4console.log(x);

[1,3,4,7]

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1,3,5,7
y	2,4,6
a,b,c	1,2,3

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LESSONS16%CHALLENGES0%ASSESSMENT

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Lessons16%

Introduction

Level 1 (5/5)

Level 2 (13/13)

Activity 100:45

Activity 200:35

Activity 300:21

Activity 400:18

Activity 500:25

Activity 607:39

Activity 700:50

Activity 802:44

Activity 905:34

Activity 1002:45

Activity 1105:02

Activity 1211:22

Activity 1304:50

Level 3 (0/15)

Level 4 (0/8)

Level 5 (0/10)

Level 6 (0/18)

Level 7 (0/5)

Level 8 (0/5)

Reset All Levels

Level 2Challenge 13

Predict the output of the following code:

1var x = [1,3,5,7];

2var y = [2,4,6];

3x[2] = y[x.length-3] + x[ x[0] + y[0] ];

x[2] =y[1]+ x[3]

4console.log(x);

[1,3,11,7]

SUBMIT

NEXT ACTIVITY

Hey, you got it right! Wanna see how we did it?

Report a Mistake?

T Diagram

Variable	Values
x	1,3,5,7
y	2,4,6
a,b,c	1,2,3