

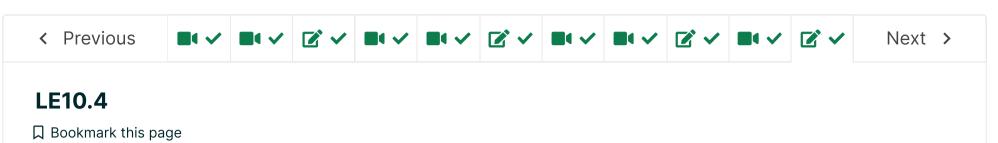
<u>Help</u>

selfpoised >

<u>Course</u> <u>Progress</u> <u>Dates</u> <u>Discussion</u>

☆ Course / 10. Assembly Language, Models of Computation / Lecture Videos (40:10)





**⊞** Calculator

## LE10.4.1: Uncomputable functions

1.0/1.0 point (ungraded)

We saw in lecture that the function Halts(k, j) which determines whether TM k halts with the argument j is uncomputable. For each of the following functions, describe whether that function is computable or not and compare your reasoning with that of the solutions. Don't worry if you find these questions hard -- just read and think about the provided solutions.

Yes, function is computable	
No, function is not computable	
<b>✓</b>	
B) HZero(k) which determines whether T_k halts with the argument zero. Hence HZero lalts, else 0. [HINT: this is tricky].	(k) returns 1 iff T_k[0]
Yes, function is computable	
No, function is not computable	
<b>✓</b>	
C) H12345(x) which determines whether TM 12345 halts with the argument 12345.	
Yes, function is computable	
Yes, function is computable      No, function is not computable	
No, function is not computable  No, function is not computable  D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y >= 100).	ar 2000+y, for y < 100 (and
No, function is not computable  No, function is not computable  D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year	ar 2000+y, for y < 100 (and
No, function is not computable  D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y >= 100).	ar 2000+y, for y < 100 (and
<ul> <li>No, function is not computable</li> <li>✓</li> <li>D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y &gt;= 100).</li> <li>Yes, function is computable</li> </ul>	ar 2000+y, for y < 100 (and
<ul> <li>No, function is not computable</li> <li>✓</li> <li>D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y &gt;= 100).</li> <li>Yes, function is computable</li> </ul>	ar 2000+y, for y < 100 (and
No, function is not computable  No, function is not computable  D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y >= 100).  Yes, function is computable  No, function is not computable  Submit	
No, function is not computable  D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y >= 100).  Yes, function is computable  No, function is not computable  Submit  Discussion	ar 2000+y, for y < 100 (and
No, function is not computable  Discussion  No, function is not computable  No, function is not computable  Submit	
<ul> <li>No, function is not computable</li> <li>✓</li> <li>D) Dow(y) = the final value of the Dow Jones average on the last trading day of the year for y &gt;= 100).</li> <li>Yes, function is computable</li> <li>No, function is not computable</li> </ul>	Hide Discussion

Previous

Next >

© All Rights Reserved



## edX

**About** 

**Affiliates** 

edX for Business

Open edX

Careers

<u>News</u>

## Legal

Terms of Service & Honor Code

Privacy Policy

**Accessibility Policy** 

Trademark Policy

<u>Sitemap</u>

## **Connect**

<u>Blog</u>

**Contact Us** 

**Help Center** 

**Media Kit** 

**Donate** 















© 2021 edX Inc. All rights reserved.

深圳市恒宇博科技有限公司 <u>粤ICP备17044299号-2</u>