

Homework 1

Submit this assignment at the start of class.

Name:

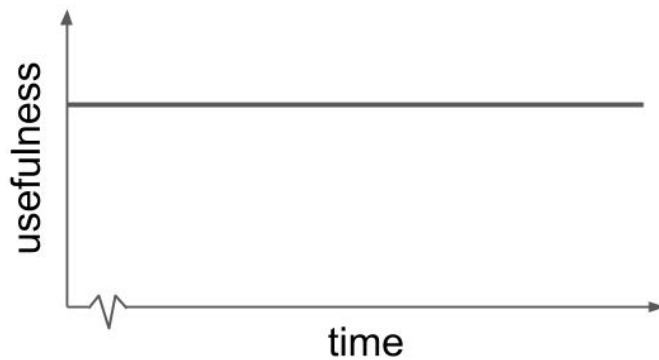
PID:

Email address:

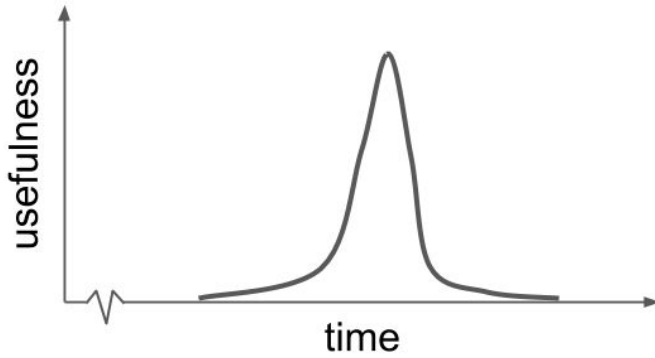
Part 1 - Real-world Examples

For each of the following graphs, you will be asked to present a real-world example and defend that example. By saying "real-world examples," I am looking for examples like those that could be part of a person's daily routine (like making a cup of tea) as opposed to computer processes.

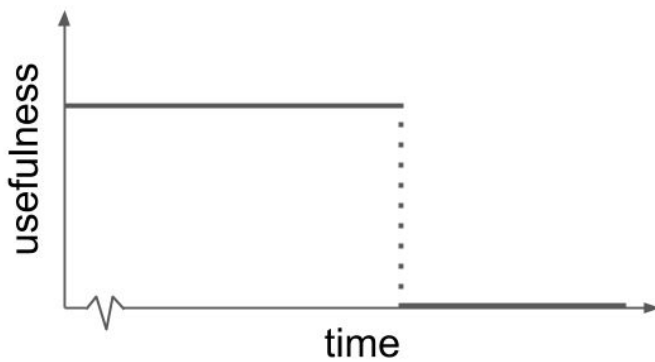
What is a real-world example of something that has the below usefulness function? Explain how your example matches the graph. (4 points)



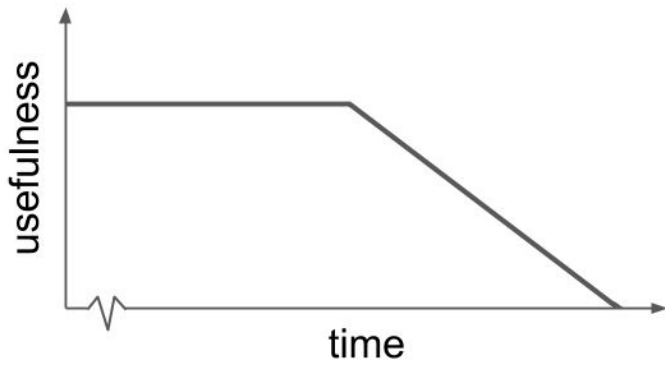
What is a real-world example of something that has the below usefulness function? Explain how your example matches the graph. (4 points)



What is a real-world example of something that has the below usefulness function? Explain how your example matches the graph. (4 points)



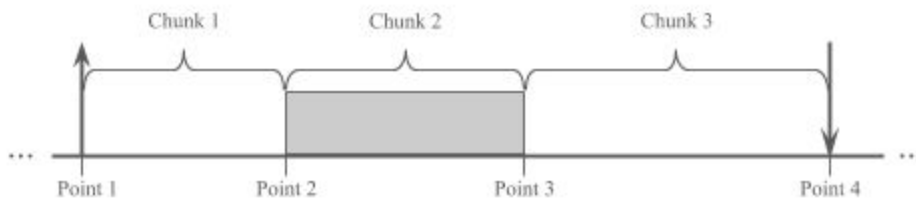
What is a real-world example of something that has the below usefulness function? Explain how your example matches the graph. (4 points)



Part 2 - Reading Questions

For the following questions, select the point or chunk(s) that correspond to the given term based on the diagram of the one-shot-job shown. Each point indicates that specific point in time, and the chunks indicate durations of time. For example, if you are trying to indicate the time the up arrow occurs, you would select "Point 1". If instead you are trying to indicate the time from the up arrow to the time of the down arrow, you should select "Chunk 1", "Chunk 2", and "Chunk 3", as those three sum to the duration of time between those two arrows.

Schedule 1



Which of the following corresponds to the computation time? ___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

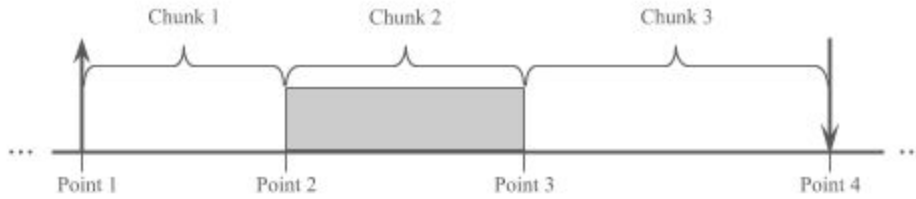
Which of the following corresponds to the release time? ___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the absolute deadline? ___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Schedule 1



Which of the following corresponds to the laxity?

___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the relative deadline?

___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the finishing time?

___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the response time?

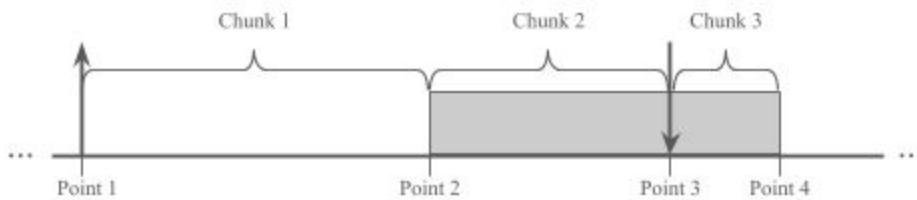
___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

A different job execution...

Do the same as above for the execution of the one-shot-job shown below.

Schedule 2



Which of the following corresponds to the start time?

___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the relative deadline?

___/2

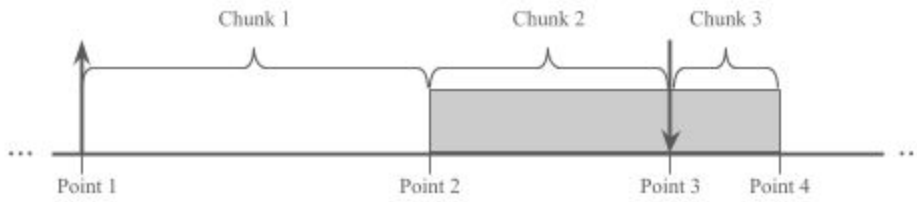
- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the finishing time?

___/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Schedule 2



Which of the following corresponds to the tardiness? _____/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |

Which of the following corresponds to the response time? _____/2

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> Point 1 | <input type="checkbox"/> Chunk 1 |
| <input type="checkbox"/> Point 2 | <input type="checkbox"/> Chunk 2 |
| <input type="checkbox"/> Point 3 | <input type="checkbox"/> Chunk 3 |
| <input type="checkbox"/> Point 4 | |
-

Feedback

How much time did you spend completing this assignment (ignoring interruptions)?

How much time did you spend doing the assigned reading (ignoring interruptions)?