



Score 5: Very helpful


A very helpful answer to an academic question should meet at least 4 criterias of the following guidelines. A very helpful answer to a daily question should meet at least 3 criterias.


Positive:

- A very helpful answer should not only help the users solve the current problem clearly and precisely, but also generalize the problem so that the users could know the mechanism behind the question or have a better knowledge of the general background.
- A very helpful answer should be well structured with detailed examples so that the users could understand the application and the mechanism readily. Since sometimes sentences are abstract and an example is also a great method to enable users to understand the application.
- A very helpful answer should be logical. Therefore, even if the answer is simple it should provide a detailed explanation or reason.
- A very helpful answer should be reasonable. Therefore, a simple answer should include an actual experience or story.
- A very helpful answer to a question should have moderate word length. Answers that are too long can be hard to catch the point while answers too short may not have enough information to answer the questions. Furthermore, the moderate length also depends on the type of questions. For example, for academic problems such as programming and mathematics, the length should be 50 – 150 words. For some issues such as history, literature and politics, the length could be longer, which is about 100 – 1000 words.
- A very helpful answer should be rigorous. Therefore, any example or the equation should provide the external link, which will not only show the authority of the answer, but also provide users with detailed explanation if users would like to know more information and provide users who have similar questions with the detailed material.
- A very helpful answer should have a clear structure, including using bullet points or highlighting keywords. The most important information should appear in the beginning of the answers.

12  Gradient Descent (AKA steepest descent) aims at finding a local minimum of a multivariate function $F(x)$ by taking steps proportional to the negative of the gradient of $F(x)$ at the current point. The update rule is the following:


$$\mathbf{x}_{n+1} = \mathbf{x}_n - \gamma_n \nabla F(\mathbf{x}_n), \quad n \geq 0.$$

 where the step size γ_n is allowed to change at every step and can be determined, for example, by *line searches*.

 Implementing the above update rule in CUDA is pretty easy. Below, I'm providing a full example using the *Rosenbrock function* as the cost functional to be optimized, exploiting the analytical gradient, and considering a constant value for the step size through the iterations (namely, $\gamma_n = \gamma$). The `Utilities.cu` and `Utilities.cuh` files are maintained at [OrangeOwlSolutions/CUDA_Uilities](#) and omitted here. The example implements the CPU as well as the GPU approach.

```

**kernel.cu**

#include <stdio.h>
#include <float.h>

#include "cuda_runtime.h"
#include "device_launch_parameters.h"

```

The example above is a very helpful answer. It has moderate length and clear structure. Furthermore, it firstly generalizes the problem, defines gradient descent problem and then provides a demonstration so that users could understand the mechanism. Moreover, it also provides users with external links so that they could get further information about CUDA.

Score 4: Helpful

A helpful answer to an academic question should meet at least 3 criterias of the positive guidelines and at least one sub-criteria of the negative guideline. A helpful answer to a daily question should meet at least 2 criterias of the positive guidelines.

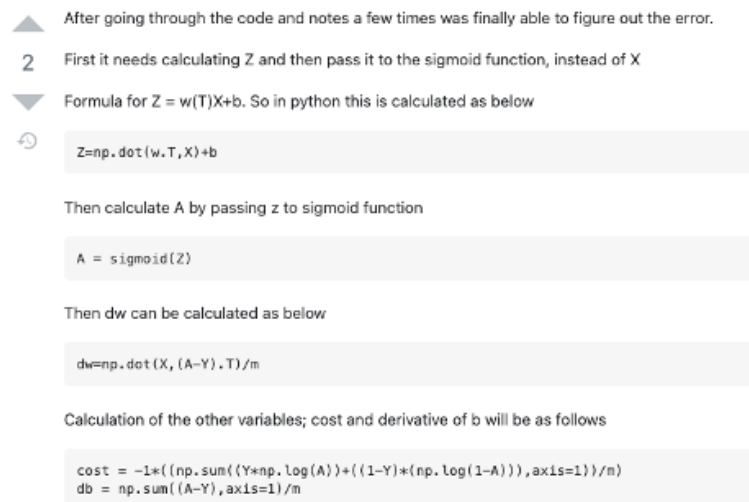
Positive:

- A helpful answer to a question should address the problem directly but they would only cover the range for merely the answers without providing further background information or mechanism.
- Similar to very helpful answers, a helpful answer to a question should have moderate word length, which also depends on the type of questions. For example, for academic problems such as programming and mathematics, the length should be 50 – 150 words. For some issues such as history, literature and politics, the length could be longer, which is about 100 – 1000 words.

- A helpful answer should have a clear structure, including using bullet points, highlighting keywords or conjunction words. The most important information should appear in the beginning of the answers.
- A very helpful answer should be logical. Therefore, even if the answer is simple it should provide a detailed explanation or reason.
- A very helpful answer should be reasonable. Therefore, a simple answer should include an actual experience or story.

Negative:

- A helpful answer should satisfy at least one of the following criteria,
 - Fail to provide users with external links or references so that the students could not acquire extra knowledge or understand the mechanism under the problem but just be able to solve the current problem.
 - Fail to provide any example to illustrate the point or there is no explanation on the examples provided.



The example above is a helpful answer. It has moderate length and clear structure with conjunction words “After”, “Then”. It also provides detailed examples with explanations so that the users could clearly solve the problem. However, it fails to provide external links and reference or generalize the problems so that users could not get further information.

Score 3: Somewhat Helpful

A somewhat answer to an academic question should meet at least 2 criterias of the positive guidelines and 2 criterias of the negative guidelines. A

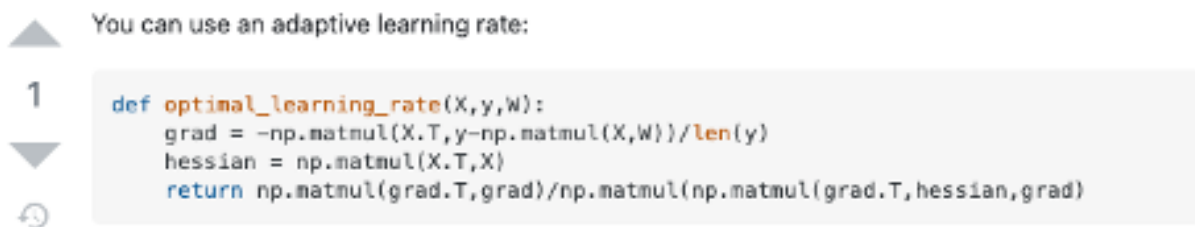
somewhat helpful answer to a daily question should meet 2 criterias of the positive guidelines and at least one criteria of the negative guidelines.

Positive:

- A somewhat helpful answer could just basically help users solve the current questions or part of the questions but could not clearly explain the answer or generalize the current problem so that it will take users some time to understand it.
- A somewhat helpful answer should provide the users with some explanations that could solve the current problem. However, it just gives theoretical or qualitative explanations and sometimes the explanations could be abstract and hard to understand.

Negative:

- A somewhat helpful answer usually doesn't have moderate length. An answer with length less than 30 words or more than 200 words could be defined as not moderate.
- A somewhat helpful answer usually does not follow any of the following criteria,
 - Fail to provide users with external links or references so that the students could not acquire extra knowledge or understand the mechanism behind the problem.
 - Fail to provide any example to illustrate the point or there is no explanation on the examples provided.
 - Fail to provide clear structure, including using bullet points, highlighting keywords or conjunction words.
 - Fail to provide a detailed explanation or reason.
 - Fail to provide an actual experience or story.



The answer above is a somewhat helpful answer. It provides an example that could help users solve the problem. However, its length is too short and it fails to provide some explanations to the examples so that users may not understand the meaning of the code. Furthermore, it doesn't have a clear structure or external link.

Score 2: Slightly Helpful

A slightly helpful answer to an academic question should meet at least one criteria of the positive guidelines and at least 2 criterias of the negative

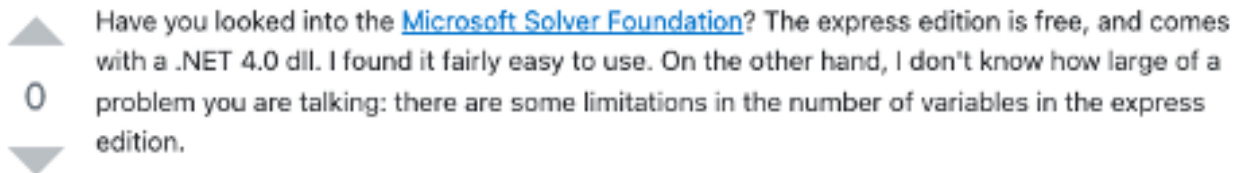
guidelines. A somewhat helpful answer to a daily question should meet one criteria of the positive guidelines and at least 2 criterias of the negative guidelines.

Positive:

- A Slightly helpful answer could just basically help users solve part of the questions or give some relevant material or suggestions.
- A slightly helpful answer can be a supplement or addition to others' answers but it is not the key part to the solution.

Negative:

- A slightly helpful answer can contain some irrelevant information regarding the question.
- A somewhat helpful answer usually doesn't have moderate length. Its answer could include some simple sentences, unprofessional suggestions or some material copied from the website. An answer with length less than 30 words or more than 200 words could be defined as not moderate.
- A slightly helpful answer can have a chaotic structure, decreasing the readability of the answer texts. There are no usually bullet points or highlighted lines or keywords.
- A slightly helpful answer can have no example or external link provided.



The example above is a slightly helpful answer. It somehow provides relevant information, which is an external link that might be helpful. However, it fails to provide an explanation to the external link and some examples so that users might not understand the meanings. Furthermore, it asks questions, which means the users could not totally solve the problem.

Score 1: Not Helpful

A not helpful answer to an academic question should meet at least 4 criterias of the negative guidelines. A not helpful answer to a daily question should meet at least 3 criterias of the negative guidelines.

Negative:

- A not helpful answer is likely to only contain irrelevant information regarding the problem topic, or the answer is completely wrong or misleading.
- A not helpful answer just gives some context such as simple sentences, unprofessional suggestions or some material copied from the website, which are somehow concerned with the problems.
- Sometimes the questions are stated unclearly or anonymously so that people could not understand users' questions. Therefore, a not helpful answer could just ask further explanations of the questions.
- Answers that are not helpful can have bad structures where readers cannot identify what is the key point. The answer usually consists of one single large paragraph where people need to search for the actual location of the answer.
- A not helpful answer could have a bad influence such as anti-socialism, racism etc.

A good way to have a synthetic view of what's going on "origin" is:

```
git remote show origin
```

-
- 11 But that command doesn't show me how many commits there have been on "origin" since my last pull, does it? The way I understood it "git remote show origin" is a local operation and does not go over the network to fetch information. – [Lernkurve](#) Mar 25, 2010 at 12:05 ✎
-
- 2 The output **doesn't contain any** information about the *content* of the remote. – [Peter Mortensen](#) Oct 25, 2020 at 4:26
-

The example above is not a helpful answer. The information it provides is wrong and cannot solve the original problem. Besides, it doesn't offer any further explanation on the code. Also there is only one simple sentence to indicate what the answer is trying to do, which confuses the readers.