AP® COMPUTER SCIENCE PRINCIPLES
2019 SCORING COMMENTARY

Jakob's Explore Performance Task

Graded by Anthony R.

Row 1: 1
Row 2: 1
Row 3: 1
Row 4: 1
Row 5: 1
Row 6: 1
Row 7: 1
Row 8: 1

Row 1:
This response earned a point for this row.
The artifact identifies the computing innovation as cryptocurrency, specifically bitcoin, and illustrates that the purpose is to take the place of physical currency while allowing access to more advanced systems such as decentralized currency.

Row 2:
This response earned a point for this row.
The response states a correct fact: "the ability to combat fraud, specifically chargebacks, of electronic currency."

Row 3:
This response earned a point for this row.
The response identifies one effect of the innovation: "It eliminates the need for converting one currency to another because a decentralized currency can easily be universal and easily accessible to all."

Row 4:
This response earned a point for this row.
The response identifies both a beneficial and a harmful effect.
A beneficial effect is that "The impacts of a decentralized currency are highly beneficial. It eliminates the need for converting one currency to another because a decentralized currency can easily be universal and easily accessible to all." A harmful effect is that "While the crypto

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Jakob's Explore Performance Task (continued)

network itself may have a very high level of security. The third parties working within Bitcoin do not always have adequate levels of protection and can be taken advantage of by those willing to work around the law."

Row 5:
This response earned a point for this row.
The response explains how the harmful effect impacts the economy by stating that "the third parties working within Bitcoin do not always have adequate levels of protection and can be taken advantage of by those willing to work around the law. Thus, without effective regulations Bitcoin can become a cornerstone of crime rings and money laundering."

Row 6:
The response earned a point for this row.
The response identifies the data as a "private key." The response explains how the data is consumed: "Essentially, whenever there is a transacter or transfer of funds between two Bitcoin wallets, the Bitcoin wallet holds on to the key. The key gives mathematical proof that the funds come from the wallet's manager, the key acts as a digit signature. Once a key has been assigned to a transaction, no one is able to alter any of the circumstances or characteristics of the transaction."

Row 7:
The response earned a point for this row.
The response identifies a data privacy concern: "The fact that all transactions and their signature are recorded are on one hand a massive benefit of the Bitcoin system but also has great security risks and bars industries such as healthcare, legal, government sectors from using Bitcoin (Price). If these fields were to introduce Bitcoin there would be large susceptibility to leaking crucial, confidential information."

Row 8:
The response earned a point for this row.
The response uses names for in-text citations that are matched to the references.