

CSC148 Worksheet 5 Solution

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Question 1

```
1  """
2  from datetime import date, timedelta
3
4  ...
5
6  misbehaved_1 = Tweet('', date.today(), 'test')
7  misbehaved_1.like(-1)
8
9  yesterday = date.today() - timedelta(days=1)
10 misbehaved_2 = Tweet('john', yesterday, 'test')
11
12 misbehaved_3 = Tweet('john', date.today(), '')
13 """
```

Correct Solution:

```
1  """
2  from datetime import date, timedelta
3
4  ...
5
6  misbehaved_1 = Tweet('', date.today(), 'test')
7  misbehaved_1.like(-1)
8
9  yesterday = date.today() - timedelta(days=1)
10 misbehaved_2 = Tweet('john', yesterday, 'test')
11
12 misbehaved_3 = Tweet('john', date.today(), '')
13
14 misbehaved_4 = Tweet('john doe', date.today(), 'test') # More
15 solution!!
16 """
```

Question 2

- A tweet must receive positive number of likes
- A tweet must have user id without spaces

Correct Solution:

- A tweet must receive **non-negative** number of likes
- **A tweet user id must not be empty.**
- A tweet must have user id without spaces
- **A tweet must have content length less than or equal to 280 characters**

Question 3

- Fix for the property 'a tweet must receive positive number of likes'

```
1  class Tweet:
2      ...
3
4      def like(self, n: int) -> None:
5          """Record the fact that this tweet received <n> likes.
6             These likes are in addition to the ones <self> already has
7             .
8             """
9
10         if n < 0:
11             raise ValueError('n must be non-negative value')
12
13         self.likes += n
```

- Fix for the property 'a tweet user id must not be empty.'

```
1  class Tweet:
2      ...
3
4      def __init__(self, who: str, when: date, what: str) -> None:
5          """Initialize a new Tweet.
6          """
7
8          if who.strip() == '':
9              raise ValueError("variable 'who' must not be empty")
10
11         self.userid = who
12         self.content = what
```

```

13         self.created_at = when
14         self.likes = 0
15

```

- Fix for the property 'a tweet must have user id without spaces'

```

1  class Tweet:
2      ...
3
4      def __init__(self, who: str, when: date, what: str) -> None:
5          """Initialize a new Tweet.
6          """
7
8          if ' ' in who:
9              raise ValueError("variable 'who' must not have spaces")
10
11
12      self.userid = who
13      self.content = what
14      self.created_at = when
15      self.likes = 0
16

```

- Fix for the property 'a tweet must have content length less than or equal to 280 characters'

```

1  class Tweet:
2      ...
3
4      def __init__(self, who: str, when: date, what: str) -> None:
5          """Initialize a new Tweet.
6          """
7
8          ...
9
10         if len(what) > 280:
11             raise ValueError("variable 'what' must be 280
12             characters or less")
13
14         self.userid = who
15         self.content = what
16         self.created_at = when
17         self.likes = 0
18

```

Question 4