3. Charlie usually spends $500 a week on social media advertising. In week 2 of the dataset, he dropped the social media spend to zero. Did this save money?

Week 1 :

|  |  |  |
| --- | --- | --- |
| *Item Number* | *Frequency* | **Menu item** |
| 1 | 76 | Spag Bog |
| 2 | 105 | Risotto con Pollo |
| 3 | 82 | Soup of the day |
| 4 | 84 | Ravioli |
| 5 | 77 | Carbonara |
| 6 | 84 | Bangers & Mash |
| 7 | 108 | Cottage Pie |
| 8 | 84 | Fish & Chips |
| 9 | 67 | Chicken Tikka Masala |
| 10 | 74 | Mushroom Wellington |
| 11 | 70 | Bacon Butty |
| 12 | 78 | Red wine (1/4 bottle) |
| 13 | 82 | English Breakfast tea |
| 14 | 78 | Espresso |
| 15 | 71 | Fizzy water |
| 16 | 91 | English Ale |

Highest Ordered Item of Week 1: Cottage Pie

**Week 2:**

|  |  |  |
| --- | --- | --- |
| *Item Number* | *Frequency* | **Menu item** |
| 1 | 47 | Spag Bog |
| 2 | 52 | Risotto con Pollo |
| 3 | 55 | Soup of the day |
| 4 | 64 | Ravioli |
| 5 | 34 | Carbonara |
| 6 | 61 | Bangers & Mash |
| 7 | 70 | Cottage Pie |
| 8 | 63 | Fish & Chips |
| 9 | 52 | Chicken Tikka Masala |
| 10 | 55 | Mushroom Wellington |
| 11 | 60 | Bacon Butty |
| 12 | 49 | Red wine (1/4 bottle) |
| 13 | 55 | English Breakfast tea |
| 14 | 59 | Espresso |
| 15 | 51 | Fizzy water |
| 16 | 42 | English Ale |

Highest Ordered Item of Week 2: Cottage Pie

Revenue generated only on food orders Without Drinks in Week 1 and 2:

|  |  |  |
| --- | --- | --- |
|  | Week 1 | Week 2 |
| Total No of Orders | 911 | 611 |
| Average amount Spent on Orders | $16.91 | $16.37 |
| Total Revenue | $15,407.50 | $9,999.50 |
| Total Investment | $8,483.60 | $5,394.95 |
| Profit | $6,923.90 | $4,604.55 |
| Amount spent on social media | $500 | $0 |
| Profit after Investing in social media | $6423.90 | $4,604.55 |

Total Revenue of Weeks 1 and 2:

|  |  |  |
| --- | --- | --- |
|  | **Week 2** | **Week 2** |
| Total No. of Orders | 1311 | 868 |
| Total No. of Food Order | 911 | 613 |
| Total No. of Drinks Orders | 400 | 256 |
| Average amount Spent on Orders | $12.90 | $12.55 |
| Total Revenue | $16,905.50 | $10,895.50 |
| Total Investment | $8,483.60 | $5,397.45 |
| Profit | $8421.9 | $5498.05 |
| Amount spent on social media | $500 | $0 |
| Profit after Investing in social media | 7,921.90 | $5498 |

The restaurant made more profits in week 1 than week 2 even after spending the amount on social media. So, Charlie didn’t save any money by not spending the amount on social media in week 2.

4. Which item on the menu made the most profit in this period? Cottage Pie with Profit : $1726.3