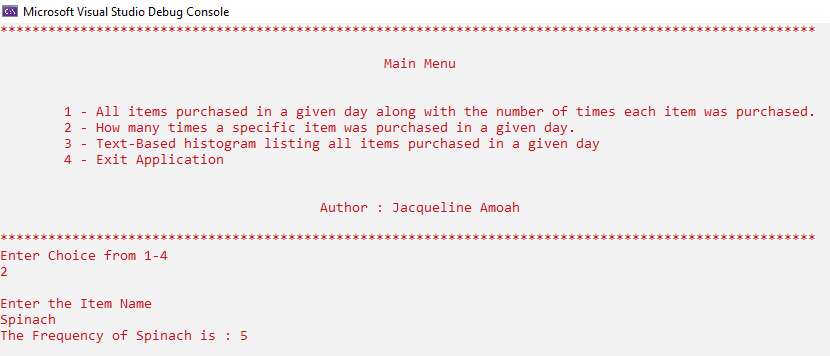
**Case 1**



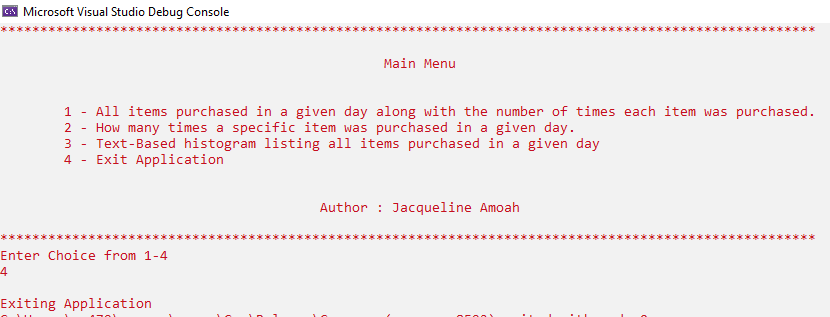
**Case 2**



**Case 3**



**Case 4**



**Invalid Output**

