OrderDate	Region	City	Category	Product	Quantity	UnitPrice	TotalPrice
1/1/2020	East	Boston	Bars	Carrot	33	1.77	58.41
1/4/2020	East	Boston	Crackers	Whole Wheat	87	3.49	303.63
1/7/2020	West	Los Angeles	Cookies	Chocolate Chip	58	1.87	108.46
1/10/2020	East	New York	Cookies	Chocolate Chip	82	1.87	153.34
1/13/2020	East	Boston	Cookies	Arrowroot	38	2.18	82.84
1/16/2020	East	Boston	Bars	Carrot	54	1.77	95.58
1/19/2020	East	Boston	Crackers	Whole Wheat	149	3.49	520.01
1/22/2020	West	Los Angeles	Bars	Carrot	51	1.77	90.27
1/25/2020	East	New York	Bars	Carrot	100	1.77	177
1/28/2020	East	New York	Snacks	Potato Chips	28	1.35	37.8
1/31/2020	East	Boston	Cookies	Arrowroot	36	2.18	78.48
2/3/2020	East	Boston	Cookies	Chocolate Chip	31	1.87	57.97
2/6/2020	East	Boston	Crackers	Whole Wheat	28	3.49	97.72
2/9/2020	West	Los Angeles	Bars	Carrot	44	1.77	77.88
2/12/2020	East	New York	Bars	Carrot	23	1.77	40.71
2/15/2020	East	New York	Snacks	Potato Chips	27	1.35	36.45
2/18/2020	East	Boston	Cookies	Arrowroot	43	2.18	93.74
2/21/2020	East	Boston	Cookies	Oatmeal Raisin	123	2.84	349.32
2/24/2020	West	Los Angeles	Bars	Bran	42	1.87	78.54
2/27/2020	West	Los Angeles	Cookies	Oatmeal Raisin	33	2.84	93.72
3/2/2020	East	New York	Cookies	Chocolate Chip	85	1.87	158.95
3/5/2020	West	San Diego	Cookies	Oatmeal Raisin	30	2.84	85.2
3/8/2020	East	Boston	Bars	Carrot	61	1.77	107.97
3/11/2020	East	Boston	Crackers	Whole Wheat	40	3.49	139.6
3/14/2020	West	Los Angeles	Cookies	Chocolate Chip	86	1.87	160.82
3/17/2020	East	New York	Bars	Carrot	38	1.77	67.26
3/20/2020	East	New York	Snacks	Potato Chips	68	1.68	114.24
3/23/2020	West	San Diego	Cookies	Chocolate Chip	39	1.87	72.93
3/26/2020	East	Boston	Bars	Bran	103	1.87	192.61
3/29/2020	East	Boston	Cookies	Oatmeal Raisin	193	2.84	548.12
4/1/2020	West	Los Angeles	Bars	Carrot	58	1.77	102.66
4/4/2020	West	Los Angeles	Snacks	Potato Chips	68	1.68	114.24
4/7/2020	East	New York	Bars	Carrot	91	1.77	161.07
4/10/2020	East	New York	Crackers	Whole Wheat	23	3.49	80.27
4/13/2020	West	San Diego	Snacks	Potato Chips	28	1.68	47.04
4/16/2020	East	Boston	Bars	Carrot	48	1.77	84.96
4/19/2020	East	Boston	Snacks	Potato Chips	134	1.68	225.12
4/22/2020	West	Los Angeles	Bars	Carrot	20	1.77	35.4
4/25/2020	East	New York	Bars	Carrot	53	1.77	93.81
4/28/2020	East	New York	Snacks	Potato Chips	64	1.68	107.52
5/1/2020	West	San Diego	Cookies	Chocolate Chip	63	1.87	117.81
5/4/2020	East	Boston	Bars	Bran	105	1.87	196.35
5/7/2020	East	Boston	Cookies	Oatmeal Raisin	138	2.84	391.92
5/10/2020	West	Los Angeles	Bars	Carrot	25	1.77	44.25

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5/13/2020 West	Los Angeles	Crackers	Whole Wheat	21	3.49	73.29
5/16/2020 East	New York	Bars	Carrot	61	1.77	107.97
5/19/2020 East	New York	Snacks	Potato Chips	49	1.68	82.32
5/22/2020 West	San Diego	Cookies	Chocolate Chip	55	1.87	102.85
5/25/2020 East	Boston	Cookies	Arrowroot	27	2.18	58.86
5/28/2020 East	Boston	Bars	Carrot	58	1.77	102.66
5/31/2020 East	Boston	Crackers	Whole Wheat	33	3.49	115.17
6/3/2020 West	Los Angeles		Oatmeal Raisin	288	2.84	817.92
6/6/2020 East	New York	Cookies	Chocolate Chip	76	1.87	142.12
6/9/2020 West	San Diego	Bars	Carrot	42	1.77	74.34
6/12/2020 West	San Diego	Crackers	Whole Wheat	20	3.49	69.8
6/15/2020 East	Boston	Bars	Carrot	75 28	1.77	132.75
6/18/2020 East	Boston	Crackers	Whole Wheat	38	3.49	132.62
6/21/2020 West 6/24/2020 West	Los Angeles Los Angeles	Bars	Carrot	306 28	1.77 1.68	541.62 47.04
6/27/2020 West	New York	Snacks Bars	Potato Chips Bran	110	1.87	205.7
6/30/2020 East	New York	Cookies	Oatmeal Raisin	51	2.84	144.84
7/3/2020 Last	San Diego	Bars	Carrot	52	2.84 1.77	92.04
7/6/2020 West	San Diego	Crackers	Whole Wheat	28	3.49	97.72
7/9/2020 West	Boston	Bars	Carrot	136	1.77	240.72
7/12/2020 East	Boston	Crackers	Whole Wheat	42	3.49	146.58
7/15/2020 West	Los Angeles	Cookies	Chocolate Chip	75	1.87	140.25
7/18/2020 East	New York	Bars	Bran	72	1.87	134.64
7/21/2020 East	New York	Cookies	Oatmeal Raisin	56	2.84	159.04
7/24/2020 West	San Diego	Bars	Bran	51	1.87	95.37
7/27/2020 West	San Diego	Snacks	Potato Chips	31	1.68	52.08
7/30/2020 East	Boston	Bars	Bran	56	1.87	104.72
8/2/2020 East	Boston	Cookies	Oatmeal Raisin	137	2.84	389.08
8/5/2020 West	Los Angeles	Cookies	Chocolate Chip	107	1.87	200.09
8/8/2020 East	New York	Bars	Carrot	24	1.77	42.48
8/11/2020 East	New York	Crackers	Whole Wheat	30	3.49	104.7
8/14/2020 West	San Diego	Cookies	Chocolate Chip	70	1.87	130.9
8/17/2020 East	Boston	Cookies	Arrowroot	31	2.18	67.58
8/20/2020 East	Boston	Bars	Carrot	109	1.77	192.93
8/23/2020 East	Boston	Crackers	Whole Wheat	21	3.49	73.29
8/26/2020 West	Los Angeles	Cookies	Chocolate Chip	80	1.87	149.6
8/29/2020 East	New York	Bars	Bran	75	1.87	140.25
9/1/2020 East	New York	Cookies	Oatmeal Raisin	74	2.84	210.16
9/4/2020 West	San Diego	Bars	Carrot	45	1.77	79.65
9/7/2020 East	Boston	Cookies	Arrowroot	28	2.18	61.04
9/10/2020 East	Boston	Bars	Carrot	143	1.77	253.11
9/13/2020 East	Boston	Snacks	Pretzels	27	3.15	85.05
9/16/2020 West	Los Angeles New York	Bars Cookies	Carrot Arrowroot	133 110	1.77 2.18	235.41 239.8
9/19/2020 East 9/22/2020 East	New York	Cookies	Chocolate Chip	65	2.18 1.87	239.8 121.55
9/25/2020 East 9/25/2020 West	San Diego	Bars	Bran	33	1.87	61.71
9/28/2020 West 9/28/2020 East	Boston	Cookies	Arrowroot	81	2.18	176.58
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10/1/2020	East	Boston	Bars	Carrot	77	1.77	136.29
10/4/2020	East	Boston	Crackers	Whole Wheat	38	3.49	132.62
10/7/2020	West	Los Angeles	Bars	Carrot	40	1.77	70.8
10/10/2020	West	Los Angeles	Snacks	Potato Chips	114	1.68	191.52
10/13/2020	East	New York	Cookies	Arrowroot	224	2.18	488.32
10/16/2020	East	New York	Bars	Carrot	141	1.77	249.57
10/19/2020	East	New York	Crackers	Whole Wheat	32	3.49	111.68
10/22/2020	West	San Diego	Bars	Carrot	20	1.77	35.4
10/25/2020		Boston	Cookies	Arrowroot	40	2.18	87.2
10/28/2020		Boston	Cookies	Chocolate Chip	49	1.87	91.63
10/31/2020		Boston	Crackers	Whole Wheat	46	3.49	160.54
11/3/2020		Los Angeles	Bars	Carrot	39	1.77	69.03
11/6/2020		Los Angeles	Snacks	Potato Chips	62	1.68	104.16
11/9/2020		New York	Bars	Carrot	90	1.77	159.3
11/12/2020		San Diego	Cookies	Arrowroot	103	2.18	224.54
11/15/2020		San Diego	Cookies	Oatmeal Raisin	32	2.84	90.88
11/18/2020		Boston	Bars	Bran	66	1.87	123.42
11/21/2020		Boston	Cookies	Oatmeal Raisin	97	2.84	275.48
11/24/2020		Los Angeles	Bars	Carrot	30	1.77	53.1
11/27/2020		Los Angeles	Snacks	Potato Chips	29	1.68	48.72
11/30/2020		New York	Bars	Carrot	92	1.77	162.84
12/3/2020		San Diego	Cookies	Arrowroot	139	2.18	303.02
12/6/2020		San Diego	Cookies	Oatmeal Raisin	29	2.84	82.36
12/9/2020		Boston	Bars	Banana	30	2.27	68.1
12/12/2020		Boston	Cookies	Chocolate Chip	36	1.87	67.32
12/15/2020		Boston	Crackers	Whole Wheat	41	3.49	143.09
12/13/2020		Los Angeles	Bars	Carrot	44	1.77	77.88
12/18/2020		Los Angeles	Snacks	Potato Chips	29	1.68	48.72
12/21/2020		New York	Cookies	Arrowroot	237	2.18	516.66
12/27/2020		New York	Cookies	Chocolate Chip	65	1.87	121.55
12/27/2020		San Diego	Cookies	Arrowroot	83	2.18	180.94
1/2/2021		Boston	Cookies	Arrowroot	32	2.18	69.76
1/5/2021		Boston	Bars	Carrot	63	1.77	111.51
1/8/2021		Boston	Snacks	Pretzels	29	3.15	91.35
1/0/2021			Bars	Bran	29 77	3.13 1.87	143.99
		Los Angeles					
1/14/2021		Los Angeles	Cookies	Oatmeal Raisin	80	2.84	227.2
1/17/2021		New York	Bars	Carrot	102	1.77	180.54
1/20/2021		New York	Crackers	Whole Wheat	31	3.49	108.19
1/23/2021		San Diego	Bars	Carrot	56	1.77	99.12
1/26/2021		Boston	Cookies	Arrowroot	52	2.18	113.36
1/29/2021		Boston	Bars	Carrot	51	1.77	90.27
2/1/2021		Boston	Snacks	Potato Chips	24	1.68	40.32
2/4/2021		Los Angeles	Cookies	Arrowroot	58	2.18	126.44
2/7/2021		Los Angeles	Cookies	Chocolate Chip	34	1.87	63.58
2/10/2021		New York	Bars	Carrot	34	1.77	60.18
2/13/2021		New York	Snacks	Potato Chips	21	1.68	35.28
2/16/2021	West	San Diego	Cookies	Oatmeal Raisin	29	2.84	82.36

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2/19/2021 E	East	Boston	Bars	Carrot	68	1.77	120.36
2/22/2021 E	East	Boston	Snacks	Pretzels	31	3.15	97.65
2/25/2021 \	West	Los Angeles	Cookies	Arrowroot	30	2.18	65.4
2/28/2021 \	West	Los Angeles	Cookies	Chocolate Chip	232	1.87	433.84
3/2/2021 E		New York	Bars	Bran	68	1.87	127.16
3/5/2021 E		New York	Cookies	Oatmeal Raisin	97	2.84	275.48
3/8/2021 \		San Diego	Bars	Bran	86	1.87	160.82
3/11/2021 \		San Diego	Snacks	Potato Chips	41	1.68	68.88
3/14/2021 E		Boston	Bars	Carrot	93	1.77	164.61
3/17/2021 E		Boston	Snacks	Potato Chips	47	1.68	78.96
3/20/2021 \		Los Angeles	Bars	Carrot	103	1.77	182.31
3/23/2021 \		Los Angeles	Snacks	Potato Chips	33	1.68	55.44
3/26/2021 E		New York	Bars	Bran	57	1.87	106.59
3/29/2021 E		New York	Cookies	Oatmeal Raisin	65	2.84	184.6
4/1/2021 \		San Diego	Bars	Carrot	118	1.77	208.86
4/4/2021 F		Boston	Cookies	Arrowroot	36	2.18	78.48
4/4/2021 E		Boston	Cookies	Oatmeal Raisin	123	2.18	349.32
4/10/2021 \			Bars	Carrot	90	1.77	159.3
		Los Angeles		Whole Wheat	21		73.29
4/13/2021 \		Los Angeles	Crackers			3.49	
4/16/2021		New York	Bars	Carrot	48	1.77	84.96
4/19/2021 E		New York	Snacks	Potato Chips	24	1.68	40.32
4/22/2021 \		San Diego	Cookies	Chocolate Chip	67	1.87	125.29
4/25/2021		Boston	Bars	Bran	27	1.87	50.49
4/28/2021 [		Boston	Cookies	Oatmeal Raisin	129	2.84	366.36
5/1/2021 \		Los Angeles	Cookies	Arrowroot	77	2.18	167.86
5/4/2021 \		Los Angeles	Cookies	Chocolate Chip	58	1.87	108.46
5/7/2021 [		New York	Bars	Bran	47	1.87	87.89
5/10/2021		New York	Cookies	Oatmeal Raisin	33	2.84	93.72
5/13/2021 \		San Diego	Cookies	Chocolate Chip	82	1.87	153.34
5/16/2021		Boston	Bars	Carrot	58	1.77	102.66
5/19/2021 E		Boston	Snacks	Pretzels	30	3.15	94.5
5/22/2021 \		Los Angeles	Cookies	Chocolate Chip	43	1.87	80.41
5/25/2021		New York	Bars	Carrot	84	1.77	148.68
5/28/2021 \		San Diego	Cookies	Arrowroot	36	2.18	78.48
5/31/2021 \		San Diego	Cookies	Oatmeal Raisin	44	2.84	124.96
6/3/2021 E		Boston	Bars	Bran	27	1.87	50.49
6/6/2021 E		Boston	Cookies	Oatmeal Raisin	120	2.84	340.8
6/9/2021 E		Boston	Crackers	Whole Wheat	26	3.49	90.74
6/12/2021 \	West	Los Angeles	Bars	Carrot	73	1.77	129.21
6/15/2021 E	East	New York	Bars	Bran	38	1.87	71.06
6/18/2021 E	East	New York	Cookies	Oatmeal Raisin	40	2.84	113.6
6/21/2021 \	West	San Diego	Bars	Carrot	41	1.77	72.57
6/24/2021 E		Boston	Bars	Banana	27	2.27	61.29
6/27/2021 E	East	Boston	Cookies	Chocolate Chip	38	1.87	71.06
6/30/2021 E	East	Boston	Crackers	Whole Wheat	34	3.49	118.66
7/3/2021 \	West	Los Angeles	Bars	Bran	65	1.87	121.55
7/6/2021 \	West	Los Angeles	Cookies	Oatmeal Raisin	60	2.84	170.4

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7/9/2021	East	New York	Cookies	Arrowroot	37	2.18	80.66
7/12/2021	East	New York	Cookies	Chocolate Chip	40	1.87	74.8
7/15/2021	West	San Diego	Bars	Bran	26	1.87	48.62
7/18/2021	East	Boston	Bars	Banana	22	2.27	49.94
7/21/2021	East	Boston	Cookies	Chocolate Chip	32	1.87	59.84
7/24/2021	East	Boston	Crackers	Whole Wheat	23	3.49	80.27
7/27/2021	West	Los Angeles	Cookies	Arrowroot	20	2.18	43.6
7/30/2021	West	Los Angeles	Cookies	Chocolate Chip	64	1.87	119.68
8/2/2021	East	New York	Bars	Carrot	71	1.77	125.67
8/5/2021	West	San Diego	Cookies	Arrowroot	90	2.18	196.2
8/8/2021	West	San Diego	Cookies	Oatmeal Raisin	38	2.84	107.92
8/11/2021	East	Boston	Bars	Carrot	55	1.77	97.35
8/14/2021	East	Boston	Snacks	Pretzels	22	3.15	69.3
8/17/2021	West	Los Angeles	Bars	Carrot	34	1.77	60.18
8/20/2021	East	New York	Bars	Bran	39	1.87	72.93
8/23/2021	East	New York	Cookies	Oatmeal Raisin	41	2.84	116.44
8/26/2021	West	San Diego	Bars	Carrot	41	1.77	72.57
8/29/2021	East	Boston	Cookies	Arrowroot	136	2.18	296.48
9/1/2021	East	Boston	Bars	Carrot	25	1.77	44.25
9/4/2021	East	Boston	Snacks	Pretzels	26	3.15	81.9
9/7/2021	West	Los Angeles	Bars	Bran	50	1.87	93.5
9/10/2021	West	Los Angeles	Cookies	Oatmeal Raisin	79	2.84	224.36
9/13/2021	East	New York	Bars	Carrot	30	1.77	53.1
9/16/2021	East	New York	Snacks	Potato Chips	20	1.68	33.6
9/19/2021	West	San Diego	Bars	Carrot	49	1.77	86.73
9/22/2021	East	Boston	Cookies	Arrowroot	40	2.18	87.2
9/25/2021	East	Boston	Bars	Carrot	31	1.77	54.87
9/28/2021	East	Boston	Snacks	Pretzels	21	3.15	66.15
10/1/2021	West	Los Angeles	Bars	Bran	43	1.87	80.41
10/4/2021	West	Los Angeles	Cookies	Oatmeal Raisin	47	2.84	133.48
10/7/2021	East	New York	Cookies	Arrowroot	175	2.18	381.5
10/10/2021	East	New York	Cookies	Chocolate Chip	23	1.87	43.01
10/13/2021	West	San Diego	Bars	Carrot	40	1.77	70.8
10/16/2021	East	Boston	Cookies	Arrowroot	87	2.18	189.66
10/19/2021	East	Boston	Bars	Carrot	43	1.77	76.11
10/22/2021	East	Boston	Crackers	Whole Wheat	30	3.49	104.7
10/25/2021	West	Los Angeles	Bars	Carrot	35	1.77	61.95
10/28/2021		New York	Bars	Bran	57	1.87	106.59
10/31/2021	East	New York	Snacks	Potato Chips	25	1.68	42
11/3/2021	West	San Diego	Cookies	Chocolate Chip	24	1.87	44.88
11/6/2021	East	Boston	Bars	Bran	83	1.87	155.21
11/9/2021	East	Boston	Cookies	Oatmeal Raisin	124	2.84	352.16
11/12/2021		Los Angeles	Bars	Carrot	137	1.77	242.49
11/15/2021		New York	Cookies	Arrowroot	146	2.18	318.28
11/18/2021		New York	Cookies	Chocolate Chip	34	1.87	63.58
11/21/2021		San Diego	Bars	Carrot	20	1.77	35.4
11/24/2021	East	Boston	Cookies	Arrowroot	139	2.18	303.02

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11/27/2021 East	Boston	Cookies	Chocolate Chip	211	1.87	394.57
11/30/2021 East	Boston	Crackers	Whole Wheat	20	3.49	69.8
12/3/2021 West	Los Angeles	Bars	Bran	42	1.87	78.54
12/6/2021 West	Los Angeles	Cookies	Oatmeal Raisin	100	2.84	284
12/9/2021 East	New York	Bars	Carrot	38	1.77	67.26
12/12/2021 East	New York	Crackers	Whole Wheat	25	3.49	87.25
12/15/2021 West	San Diego	Cookies	Chocolate Chip	96	1.87	179.52
12/18/2021 East	Boston	Cookies	Arrowroot	34	2.18	74.12
12/21/2021 East	Boston	Cookies	Chocolate Chip	245	1.87	458.15
12/24/2021 East	Boston	Crackers	Whole Wheat	30	3.49	104.7
12/27/2021 West	Los Angeles	Bars	Bran	30	1.87	56.1
12/30/2021 West	Los Angeles	Cookies	Oatmeal Raisin	44	2.84	124.96

### Q1. Data domain description? Food Industry/Snack Industry

### Q2. Data source description?

URL is https://www.contextures.com/xlsampledata01.html#morefiles This data source contains information about the sales of different types of cookies, bars, and snacks in big cities such as Boston, New York, San Diego, and Los Angeles.

#### Q3. Number of records? 244 records.

# Q4. A detailed explanation of columns/attributes?

- a. OrderDate: The data in which the type of snack/bar/cookie was ordered.
  - b. Region: The region in which the product was purchased (East or West)
  - c. City: The city in which the product was purchased.
  - d. Category: Whether the item ordered was a Snack or Bar or Cookie
  - e. Product: What was the type of Snack/Bar/Cookie
  - f. Quantity: How much of the item was purchased.
  - g. UnitPrice: The price per each individual unit/item
- h. TotalPrice: The total price of the order (Unit Price multiplied by the quantity)

## Q5. Assumptions, if any? None

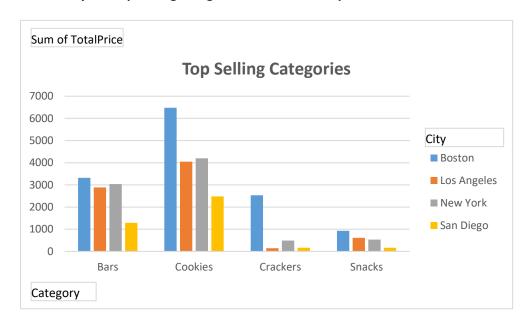
#### Q6. Write any three goals to analyze the data?

- a. Identify the top selling categories based on total price
- b. Determine which major city has the largest order amount based on total quantity
  - c. Identify the top selling products based on total price.

<b>Sum of TotalPrice</b>	<b>Column Labels</b>				
<b>Row Labels</b>	Boston	Los Angeles	New York	San Diego	<b>Grand Total</b>
Bars	3319.	99 2886.3	7 3035.21	1294	10535.57
Cookies	6481	1.5 4044.5	3 4202	2484.38	17212.41
Crackers	2533.	74 146.5	3 492.09	167.52	3339.93
Snacks	930	0.3 609.8	529.53	168	2237.67
<b>Grand Total</b>	13265.	53 7687.3	8258.83	4113.9	33325.58

Goal 1

a. Identify the top selling categories based on total price.



Based on the pivot table and the bar chart, we can conclude that the top selling categories across all of the mentioned cities are cookies. This is because the bar chart for the cookies is the largest across all cities, and the data from the pivot table affirms that.

<b>Count of Quantity</b>	<b>Column Labels</b>			
<b>Row Labels</b>	East		West	<b>Grand Total</b>
Boston		88		88
Los Angeles			55	55
New York		62		62
San Diego			39	39
<b>Grand Total</b>	1	50	94	244

Goal 2
b. Determine which major city has the largest order amount based on otal quantity.

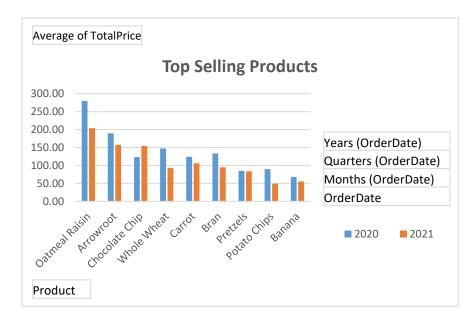


Based on the pivot chart and the bar chart, we can conclude that Boston has the highest order amount/total quantity, and San Diego has the lowest order amount/total quantity. This is because the bar chart shows that Boston has the highest order quantity, and the pivot table affirms that.

Average of TotalPrice	Column Labels 2020	2021	Grand Total
Row Labels			
Oatmeal Raisin	279.85	204.01	235.81
Arrowroot	189.97	157.09	171.94
Chocolate Chip	123.42	154.63	138.55
Whole Wheat	147.20	93.07	128.46
Carrot	124.20	105.65	115.80
Bran	133.33	94.82	109.08
Pretzels	85.05	83.48	83.70
Potato Chips	89.78	49.35	75.08
Banana	68.10	55.62	59.78
<b>Grand Total</b>	147.45	125.71	136.58

Goal 3

c. Identify the top selling products based on total price.



Based on the pivot chart and the bar chart, we can conclude that in both 2020 and 2021, oatmeal raisin was the most sold product. This is because the bar chart shows that the bars for oatmeal raisin for both 2020 and 2021 is the largest in comparison to the rest.