

Test proposed functionality in issue:

Output of original way to extract ordered column:

	age_group
0	[40, 50)
1	[40, 50)
2	[30, 40)
3	[30, 40)
4	[50, 60)
5	[20, 30)
6	[40, 50)
7	[30, 40)
8	[20, 30)
9	[50, 60)
10	[50, 60)
11	[50, 60)
12	[40, 50)
13	[40, 50)
14	[20, 30)
15	[30, 40)
16	[50, 60)
17	[30, 40)
18	[30, 40)
19	[20, 30)

Updated extraction of ordered column:

	age_group
0	[40, 50)
1	[40, 50)
2	[30, 40)
3	[30, 40)
4	[50, 60)
5	[20, 30)
6	[40, 50)
7	[30, 40)
8	[20, 30)
9	[50, 60)
10	[50, 60)
11	[50, 60)
12	[40, 50)
13	[40, 50)
14	[20, 30)
15	[30, 40)
16	[50, 60)
17	[30, 40)
18	[30, 40)
19	[20, 30)

Test proposed functionality for unordered in issue:

Output of original way to extract unordered column:

	eye_color
0	brown
1	blue
2	blue
3	brown
4	brown
5	brown
6	blue
7	brown
8	blue
9	blue
10	brown
11	brown
12	blue
13	brown
14	brown
15	brown
16	blue
17	blue
18	blue
19	brown

Updated extraction of unordered column:

	eye_color
0	brown
1	blue
2	blue
3	brown
4	brown
5	brown
6	blue
7	brown
8	blue
9	blue
10	brown
11	brown
12	blue
13	brown
14	brown
15	brown
16	blue
17	blue
18	blue
19	brown

Test functionality for all columns in issue:

Output of original way to extract categorical columns:

	eye_color	age_group
0	brown	[40, 50)
1	blue	[40, 50)
2	blue	[30, 40)
3	brown	[30, 40)
4	brown	[50, 60)
5	brown	[20, 30)
6	blue	[40, 50)
7	brown	[30, 40)
8	blue	[20, 30)
9	blue	[50, 60)
10	brown	[50, 60)
11	brown	[50, 60)
12	blue	[40, 50)
13	brown	[40, 50)
14	brown	[20, 30)
15	brown	[30, 40)
16	blue	[50, 60)
17	blue	[30, 40)
18	blue	[30, 40)
19	brown	[20, 30)

Updated extraction of categorical column:

	eye_color	age_group
0	brown	[40, 50)
1	blue	[40, 50)
2	blue	[30, 40)
3	brown	[30, 40)
4	brown	[50, 60)
5	brown	[20, 30)
6	blue	[40, 50)
7	brown	[30, 40)
8	blue	[20, 30)
9	blue	[50, 60)
10	brown	[50, 60)
11	brown	[50, 60)
12	blue	[40, 50)
13	brown	[40, 50)
14	brown	[20, 30)
15	brown	[30, 40)
16	blue	[50, 60)
17	blue	[30, 40)
18	blue	[30, 40)
19	brown	[20, 30)

Test functionality for categories in issue:

Exptected Output Categories:

```
people categories is: {'eye_color': Index(['blue', 'brown'], dtype='object'),  
'age_group': IntervalIndex([[20, 30), [30, 40), [40, 50), [50, 60)],  
dtype='interval[int64, left]')}
```

Test functionality for delegated as\_unordered method:

Original Categories:

```
age_group categories was: IntervalIndex([[20, 30), [30, 40), [40,50), [50, 60)],  
dtype='interval[int64, left]')  
eye_color categories was: Index(['blue', 'brown'], dtype='object')
```

Exptected Output after remove which works on all columns:

```
age_group categories is: Index([[20, 30), [30, 40), [40, 50), [50, 60), 0],  
dtype='object')  
eye_color categories is: Index(['blue', 'brown', 0], dtype='object')
```