

How can I use the BETWEEN operator in SAS, and what are some examples of its usage?

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The BETWEEN operator in SAS is a logical operator that allows for the selection of data within a specified range. It is used in conjunction with the WHERE statement in SAS to filter data based on certain criteria. The BETWEEN operator is written as "BETWEEN x AND y", where x and y are the lower and upper limits of the range.

For example, if we have a dataset containing the sales data for a company and we want to only select the sales that fall between \$500 and \$1000, we can use the BETWEEN operator as follows:

```
data sales;  
set company_sales;  
where sales_amount between 500 and 1000;  
run;
```

This will only select the sales data that falls within the specified range and exclude any data that does not meet this criteria.

In addition to numerical values, the BETWEEN operator can also be used for character strings and dates. For instance, if we have a dataset containing customer information and we want to select customers whose last names fall between "Kumar" and "Patel", we can use the BETWEEN operator as follows:

```
data customers;  
set customer_info;  
where last_name between "Kumar" and "Patel";  
run;
```

This will only select customers with last names starting from Kumar up to Patel.

In summary, the BETWEEN operator in SAS is a useful tool for filtering data within a given range and can be used for both numerical and character values. It provides a convenient and efficient way to select specific data based on specified criteria.

Use the BETWEEN Operator in SAS (With Examples)

You can use the BETWEEN operator in SAS to select rows where column values are between two particular values.

Often the **BETWEEN** operator is used within a **PROC SQL** statement in the following manner:

```
proc sql;  
select *  
from my_data  
where points between 15 and 35;quit;
```

This particular example selects all rows from the dataset called **my_data** where the value in the **points** column is between 15 and 35.

The following example shows how to use the **BETWEEN** operator in practice.

Example: How to Use **BETWEEN** Operator in SAS

Suppose we have the following dataset in **SAS** that contains information about various basketball players:

```
/*create dataset*/  
data my_data;  
input team $ points;  
datalines;  
Cavs 12  
Cavs 14
```

Warriors 15

Hawks 18

Mavs 31

Mavs 32

Mavs 35

Celtics 36

Celtics 40

;

run;

/*view dataset*/

proc printdata=my_data;

Obs	team	points
1	Cavs	12
2	Cavs	14
3	Warriors	15
4	Hawks	18
5	Mavs	31
6	Mavs	32
7	Mavs	35
8	Celtics	36
9	Celtics	40

We can use the BETWEEN operator in PROC SQL to select only the rows where the value in the points

column is between 15 and 35:

```
/*select all rows where value in points column is  
between 15 and 35*/
```

```
proc sql;
```

```
select *
```

```
from my_data
```

```
where points between 15 and 35;quit;
```

team	points
Warriors	15
Hawks	18
Mavs	31
Mavs	32
Mavs	35

Notice that the only rows returned are the ones where the value in the points column is between 15 and 35.

Also note that you can use the BETWEEN operator with additional conditions in the WHERE statement.

For example, you can use the following syntax to only return rows where the value in the points column is between 15 and 35 *and* the value in the team column is 'Mavs':

```
/*select rows where points is between 15 and 35 and  
team is Mavs*/  
proc sql;  
select *  
from my_data  
where (points between 15 and 35) and team='Mavs';quit;
```

team	points
Mavs	31
Mavs	32
Mavs	35

Note: You can find the complete documentation for the BETWEEN operator in SAS .

The following tutorials explain how to perform other common tasks in SAS: