How is READ NEXT implemented in isCOBOL ESQL Generator (EasyDB)?

The START statement creates a cursor, and READ NEXT/PREVIOUS fetches the cursor.
Using the isCOBOL debugger, you can step into the READ NEXT and the source code for the bridge programs generated by edbiis.exe to give you a better understanding of how this works.

By default, each elementary item maps to a separate column in the RDBMS.
In order to read rows ordered by a composite key, the generated code uses multiple cursors successively with different where clauses.

Note
That you can use the EFD USE-GROUP directive to instruct the isCOBOL ESQL Generator to store a composite key in a single column in the table.
See the isCOBOL Evolve documentation, in the Language Reference book, under EFD Directives/USE GROUP Directive for more information.

Here is an example:

With the following FD key:

```
    FD ACC.   01 ACC-REC.       05 ACC-KEY.          10 ACC-ID    PIC 9(6).          10 ACC-
TY    PIC 9(3).          10 ACC-CU    PIC 9(3).          10 ACC-BR    PIC 9(3).          10 ACC-IN-
CD PIC 9(2).
```

If you look at the generated code you will see the following WHERE clauses:

```
   where (ACC_ID = ? and ACC_TY = ? and ACC_CU = ? and ACC_BR = ? and ACC_IN_CD >= ?)
 where (ACC_ID = ? and ACC_TY = ? and ACC_CU = ? and ACC_BR > ?)   where (ACC_ID = ? an
d ACC_TY = ? and ACC_CU > ?)   where (ACC_ID = ? and ACC_TY > ?)   where (ACC_ID > ?)
```

so that if ACC-KEY is 00000100200300405 then the code for START ACC KEY NOT
   where (ACC_ID = 1 and ACC_TY = 2 and ACC_CU = 3 and ACC_BR = 4 and ACC_IN_CD >= 5) order by ACC_ID, ACC_TY, ACC_BR, ACC_IN_CD

and after returning all of the rows in that result set (or if the result set it empty), then the code uses

```
   where (ACC_ID = 1 and ACC_TY = 2 and ACC_CU = 3 and ACC_BR > 4) order by ACC_ID, ACC
_TY, ACC_BR, ACC_IN_CD
```

and after returning all of the rows in that result set (or if the result set it empty), then the code uses

```
   where (ACC_ID = 1 and ACC_TY = 2 and ACC_CU > 3) order by ACC_ID, ACC_TY, ACC_BR, AC
C_IN_CD
```

and after returning all of the rows in that result set (or if the result set it empty), then the code uses

```
   where (ACC_ID = 1 and ACC_TY > 2) order by ACC_ID, ACC_TY, ACC_BR, ACC_IN_CD
```

and after returning all of the rows in that result set (or if the result set it empty), then the code uses

```
   where (ACC_ID > 1) order by ACC_ID, ACC_TY, ACC_BR, ACC_IN_CD
```

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