## Task 2

*Create different types of functions.*

*Solution*

First, we create a table with the following fields.

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Basically, this system does simple calculations like summation, differentiation, product, etc. to the given input.

Here, we will be creating custom functions. We can do that by creating both global variables and local variables.

**Step 1**: We go to Global C/AL (CTRL+G)

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**Step 2**: We will be creating 2 variables in the ‘Variables’ tab. Then we click the ‘Functions’ tab.

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**Step 3**: We will type ‘sum’ and then click ‘Locals’ on the right and enter 2 variables.

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**Step 4**: Click on ‘Return Value’ and change ‘Return Type’ to ‘Decimal’.

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**Step 5**: Click on ‘Variables’ tab. Create 1 variable here with ‘Decimal’ datatype. We will be using this variable to return the output/data after processing the function.

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Now let’s open ‘C/AL Code (F9)’ and add some code.

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| **Documentation()**  **OnInsert()**  **OnModify()**  **OnDelete()**  **OnRename()**  **Totalsum - OnValidate()**  **Totalsum - OnLookup()**  **Totaldiff - OnValidate()**  **Totaldiff - OnLookup()**  **Totalmul - OnValidate()**  **Totalmul - OnLookup()**  **Totaldivi - OnValidate()**  **Totaldivi - OnLookup()**  **Totalavg - OnValidate()**  **Totalavg - OnLookup()**  **a - OnValidate()**  **Totalsum := sum(a,b);**  **a - OnLookup()**  **b - OnValidate()**  **Totalsum := sum(a,b);**  **b - OnLookup()**  **LOCAL sum**(x : Decimal;y : Decimal) : Decimal  z := x + y;  EXIT(z) |

Now let’s do this for other functions as well.

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| **Documentation()**  **OnInsert()**  **OnModify()**  **OnDelete()**  **OnRename()**  **Totalsum - OnValidate()**  **Totalsum - OnLookup()**  **Totaldiff - OnValidate()**  **Totaldiff - OnLookup()**  **Totalmul - OnValidate()**  **Totalmul - OnLookup()**  **Totaldivi - OnValidate()**  **Totaldivi - OnLookup()**  **Totalavg - OnValidate()**  **Totalavg - OnLookup()**  **a - OnValidate()**  **Totalsum := sum(a,b);**  **Totaldiff := diff(a,b);**  **Totalmul := mul(a,b);**  **Totaldivi := divi(a,b);**  **Totalavg := avg(a,b);**  **a - OnLookup()**  **b - OnValidate()**  **Totalsum := sum(a,b);**  **Totaldiff := diff(a,b);**  **Totalmul := mul(a,b);**  **Totaldivi := divi(a,b);**  **Totalavg := avg(a,b);**  **b - OnLookup()**  **LOCAL sum(x : Decimal;y : Decimal) : Decimal**  **z := x + y;**  **EXIT(z)**  **LOCAL diff(x : Decimal;y : Decimal) : Decimal**  **s := x - y;**  **EXIT(s)**  **LOCAL mul(x : Decimal;y : Decimal) : Decimal**  **e := x \* y;**  **EXIT(e)**  **LOCAL divi(x : Decimal;y : Decimal) : Decimal**  **f := x / y;**  **EXIT(f)**  **LOCAL avg**(x : Decimal;y : Decimal) : Decimal  o := (x + y)/2;  EXIT(o) |

The inclusion of other functions is self-explanatory.

Output

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