Software Design & Development
Pre-Defined Functions

A pre-defined function is a function already built into the programming language which performs mathematical calculations, manipulates text, and formats values. Most programming languages have hundreds of pre-defined functions that can be used at any time to perform a specific task.

Advantages of pre-defined functions

- Saves the programmer lots of time, this is because
  - the code has already been written, therefore programmers have less code to create
  - the code has already been tested, therefore less time spent debugging

Pre-Defined Functions for N5

Function	Purpose	Example	Description
ROUND	Round a numeric value to a specified number of decimal places	Math.round(average, 0)	Rounds average to 0 decimal places
		Math.round(weight, 2)	Rounds weight to 2 decimal places
RANDOM	Generates a random number	Randomize RandomNumber = Int (RND * 10)	Generates a random number between 0 and 10
		Randomize RandomNumber = Int (RND * 10) + 1	Generates a random number between 1 and 10
		Randomize RandomNumber = Int(Rnd * 50)	Generates a random number between 0 and 50
LENGTH	Returns the length of a string	LEN(name) If LEN(ID) <> 5	Returns the number of characters in name Checks if the number of characters in ID **IS NOT** equal to 5

Other Useful Functions

Function	Purpose	Example	Description
LCASE	Converts a string to lower case	Name = LCASE(JENNIFER)	Name would now store jennifer
UCASE	Converts a string to upper case	Name = UCASE(Jennifer)	Name would now store JENNIFER
INT	Returns the integer value of a numeric value	Number =INT(3.1456)	Number would store the value 3
SQRT	Returns the square root of a numeric value	Number = SQRT(49)	Number would store the value 7

Parameters
Parameters are variables or values that are passed in to be used by a function.

Function	Parameters
Round(weight, 0)	Weight and 0
Len(pupil_ID)	Pupil_ID
SQRT(number)	Number

Software Design & Development
Pre-Defined Functions

A pre-defined function is a function already built into the programming language which performs mathematical calculations, manipulates text, and formats values. Most programming languages have hundreds of pre-defined functions that can be used at any time to perform a specific task.

Advantages of pre-defined functions

- Saves the programmer lots of time, this is because
  - the code has already been written, therefore programmers have less code to create
  - the code has already been tested, therefore less time spent debugging

Pre-Defined Functions for N5

Function	Purpose	Example	Description
ROUND	Round a numeric value to a specified number of decimal places	Math.round(average, 0)	Rounds average to 0 decimal places
		Math.round(weight, 2)	Rounds weight to 2 decimal places
RANDOM	Generates a random number	Randomize RandomNumber = Int (RND * 10)	Generates a random number between 0 and 10
		Randomize RandomNumber = Int (RND * 10) + 1	Generates a random number between 1 and 10
		Randomize RandomNumber = Int(Rnd * 50)	Generates a random number between 0 and 50
LENGTH	Returns the length of a string	LEN(name) If LEN(ID) <> 5	Returns the number of characters in name Checks if the number of characters in ID **IS NOT** equal to 5

Other Useful Functions

Function	Purpose	Example	Description
LCASE	Converts a string to lower case	Name = LCASE(JENNIFER)	Name would now store jennifer
UCASE	Converts a string to upper case	Name = UCASE(Jennifer)	Name would now store JENNIFER
INT	Returns the integer value of a numeric value	Number =INT(3.1456)	Number would store the value 3
SQRT	Returns the square root of a numeric value	Number = SQRT(49)	Number would store the value 7

Parameters
Parameters are variables or values that are passed in to be used by a function.

Function	Parameters
Round(weight, 0)	Weight and 0
Len(pupil_ID)	Pupil_ID
SQRT(number)	Number