

## FREESPACE --Function

## FREESPACE

## Format

FREESPACE(memory-type)

## Type

REAL

## Description

The FREESPACE function returns a number representing, in bytes, the amount of memory space available for MYARC Advanced BASIC programs and data.

The following are the memory-types:

- 0 ALL memory
- 1 program space
- 2 data space
- 3 assembly space
- 4 stack space

## Garbage Collection

Before FREESPACE returns a value, the computer executes an activity called "garbage collection".

All "inactive" strings are deleted. Strings become inactive when they are not associated with a variable. A string may be created by the computer for its internal use; it becomes inactive when no longer needed.

All "active" strings (strings that are still associated with variables) are moved to a contiguous area at the low end of memory. This leaves all available memory in one large, contiguous block.

The computer occasionally performs garbage collection by itself, i.e. when no memory is available because of an excess number and size of inactive strings.

NOTE: Stack space has a defined value of 3968 bytes. (>E000->EF80)

## Examples

```
PRINT FREESPACE(0)
```

Prints a value that indicates the amount of available memory.

```
PRINT FREESPACE(2)
```

Prints a value that indicates the amount of available data space in bytes, which is based on the amount of memory allocation you chose when you started MYARC Advanced BASIC from MDOS.