The four-byte sequence 0xD6 0x85 0x41 0xA0 stored in consecutive memory cells in a little-endian architecture represents \_\_\_\_\_\_\_\_\_\_\_ (decimal) when interpreted as a 32-bit signed integer.

-1606318634

The four-byte sequence 0x8B 0xB1 0x7C 0x96 stored in consecutive memory cells in a little-endian architecture represents \_\_\_\_\_\_\_\_\_\_\_ (decimal) when interpreted as a 32-bit signed integer.

-1770212981

The four-byte sequence 0xF6 0x45 0x71 0x85 stored in consecutive memory cells in a little-endian architecture represents \_\_\_\_\_\_\_\_\_\_\_ (decimal) when interpreted as a 32-bit signed integer.

-2056174090

The four-byte sequence 0xC8 0x85 0xFF 0x21 stored in consecutive memory cells in a little-endian architecture represents \_\_\_\_\_\_\_\_\_\_\_ (decimal) when interpreted as a 32-bit signed integer.

570394056

The four-byte sequence 0x22 0x86 0x82 0x56 stored in consecutive memory cells in a little-endian architecture represents \_\_\_\_\_\_\_\_\_\_\_ (decimal) when interpreted as a 32-bit unsigned integer.

1451394594

Values passed to a subroutine by a calling program are called \_\_\_\_\_.

**Correct!**



What general types of parameters are passed on the stack?

Parent-child arguments

Evaluation arguments

Legal arguments

Context-free arguments

Reference arguments

Value arguments

Local variables are created by adding a positive value to the stack pointer.

True

False

What advantages do stack parameters have over register parameters?

**Correct!**

Stack parameters reduce code clutter because registers do not have to be saved and restored.

Register parameters are optimized for speed.

Programs using stack parameters execute more quickly.

Stack parameters are compatible with high-level languages.

Which offers a more flexible approach, passing arguments to procedures in registers, or on the stack?

  in registers

on the stack

 A stack frame is \_\_\_\_\_

An area in the heap that is used to store global variables

The area of the stack set aside for storing global strings.

The area of the stack set aside for passed arguments, subroutine return address, local variables, and saved registers.

  A register window pointing to local variables.

  The area of the text segment set aside for passed arguments, subroutine return address, local variables, and saved registers

Which of the following shows the procedure entry code generated by MASM when the LOCAL directive is used to declare a doubleword variable?

  mov ebp,esp  
push ebp  
add esp,4

  push ebp  
mov ebp,esp  
sub esp,4

**You Answered**

  push ebp  
mov esp,ebp  
add esp,4

  mov ebp,esp  
push ebp  
sub esp,4

High-level languages always pass arrays to subroutines by value.

  True

False

 A subroutine’s stack frame always contains the caller’s return address and the subroutine’s local variables.

**Correct!**

  True

False

 Passing by reference requires popping a parameter’s offset from the stack inside the called procedure.

**Correct!**

  True

  False

 Which of the following defines an array local variable consisting of 50 signed words?

  LOCAL SWORD:wArray[50]

LOCAL wArray[50]:SWORD

LOCAL SWORD[50]:wArray

LOCAL wArray:SWORD[50]

 Place the stesp for creating a stack frame in the correct order

**Correct!**

**1**



**Correct!**

**2**              

**Correct!**

**3**



**Correct!**

**4**             

**Correct!**

**5**



**Correct!**

**6**



What are the two common types of stack parameters?

**Correct!**

  Value parameters

Static parameters.

Object parameters.

Reference parameters

Formal parameters.

Abstract parameters.

 Arrays are passed by reference to avoid copying them onto the stack.

**Correct!**

  True

  False

 Another name for a stack frame is

  Aviation record

Vinyl record

Stack record

Local storage

Heap record

Activation record

 An argument passed by reference consists of the offset of an object.

|  |  |
| --- | --- |
|  | True |
|  | False |

When an argument is passed by value, a copy of the address is pushed on the stack.

|  |  |
| --- | --- |
|  | True |
|  | False |