**Difference between CALL and JUMP instructions**

* Difficulty Level : [Basic](https://www.geeksforgeeks.org/basic/)
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**CALL** instruction is used to call a subroutine. Subroutines are often used to perform tasks that need to be performed frequently. The **JMP** instruction is used to cause the PLC (Programmable Logic Control) to skip over rungs.

The differences Between **CALL** and **JUMP** instructions are:

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| SERIAL NO. | JUMP | CALL |
| --- | --- | --- |
| 1. | Program control is transferred to a memory location which is in the main program | Program Control is transferred to a memory location which is not a part of main program |
| 2. | Immediate Addressing Mode | Immediate Addressing Mode + Register Indirect Addressing Mode |
| 3. | Initialisation of SP(Stack Pointer) is not mandatory | Initialisation of SP(Stack Pointer) is mandatory |
| 4. | Value of Program Counter(PC) is not transferred to stack | Value of Program Counter(PC) is transferred to stack |
| 5. | After JUMP, there is no return instruction | After CALL, there is a return instruction |
| 6. | Value of SP does not changes | Value of SP is decremented by 2 |
| 7. | 10 T states are required to execute this instruction | 18 T states are required to execute this instruction |
| 8. | 3 Machine cycles are required to execute this instruction | 5 Machine cycles are required to execute this instruction |