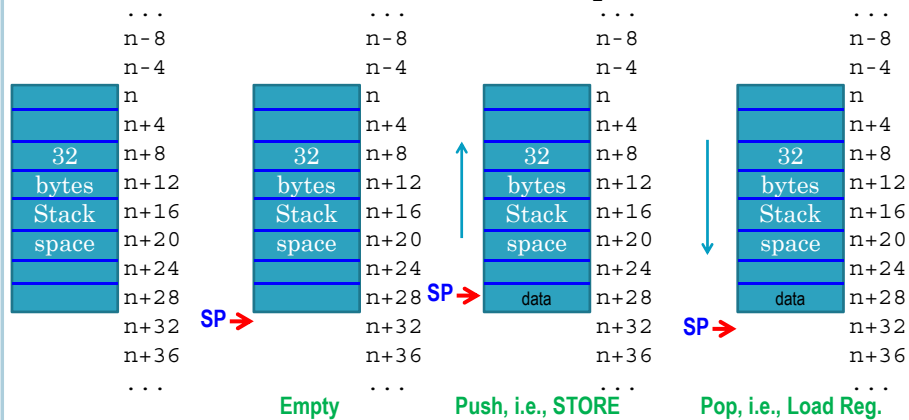


Block Moves and Stack Operations



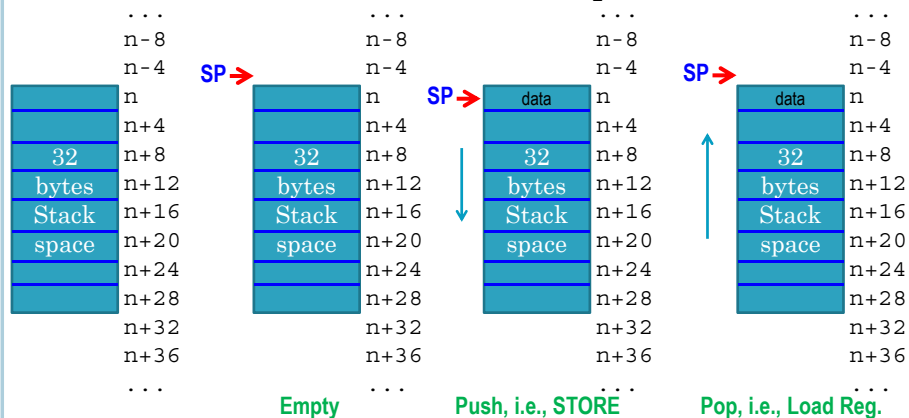
- Stack type: **FD** (i.e., Class=**F**ull and Stack growth=**D**escending)
(**STMFD** and **LDMFD**)

- Empty stack → SP just after the stack space
- Pushing on the stack → SP to be **D**ecremented **B**efore (**STMDB**)
- Popping off the stack → SP to be **I**ncremented **A**fter (**LDMIA**)

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Block Moves and Stack Operations



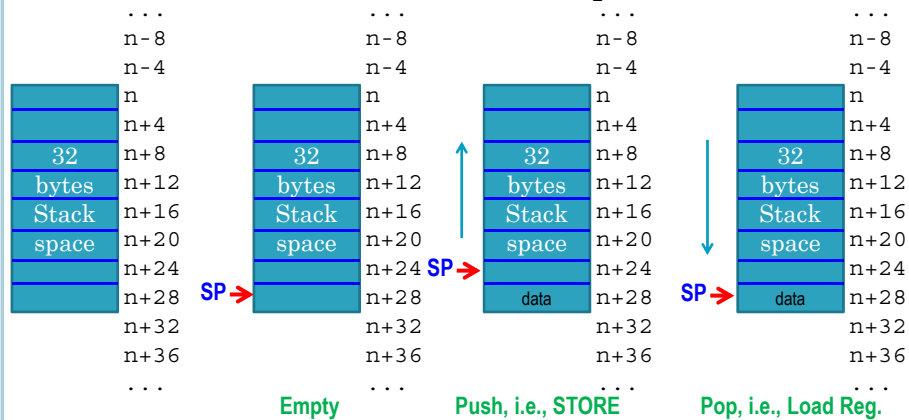
- Stack type: **FA** (i.e., Class=**F**ull and Stack growth=**A**scending)
(**STMFA** and **LDMFA**)

- Empty stack → SP just before the stack space
- Pushing on the stack → SP to be **I**ncremented **B**efore (**STMIB**)
- Popping off the stack → SP to be **D**ecremented **A**fter (**LMDA**)

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Block Moves and Stack Operations



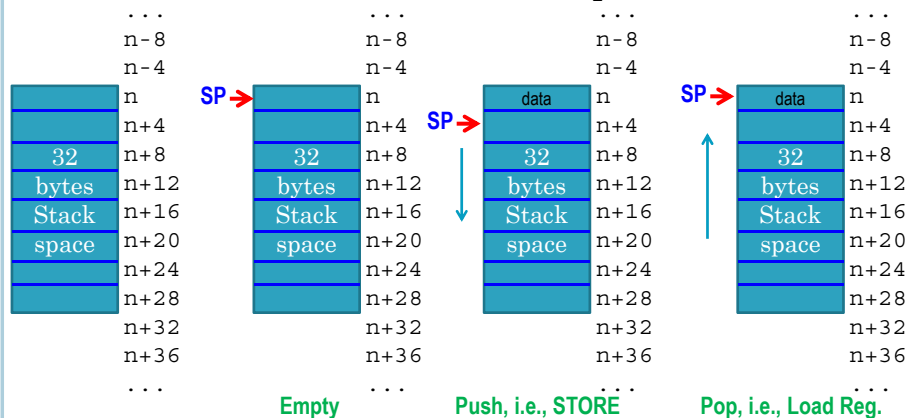
□ Stack type: **ED** (i.e., Class=**E**mpy and Stack growth=**D**escending)
(**STMED** and **LDMED**)

- Empty stack → SP pointing to the last memory word in the stack
- Pushing on the stack → SP to be **D**ecremented **A**fter (**STMDA**)
- Popping off the stack → SP to be **I**ncremented **B**efore (**LDMTB**)

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Block Moves and Stack Operations



□ Stack type: **EA** (i.e., Class=**E**mpy and Stack growth=**A**scending)
(**STM EA** and **LD ME A**)

- Empty stack → SP just before the stack space
- Pushing on the stack → SP to be **I**ncremented **A**fter (**STM IA**)
- Popping off the stack → SP to be **D**ecremented **B**efore (**LD MD B**)

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