**//push this 6**

@THIS

A = A + 6

D = M

**@SP**

**A = M**

**M = D**

**@SP**

**M = M + 1**

**//push constant 6**

@6

D = A

**@SP**

**A = M**

**M = D**

**@SP**

**M = M + 1**

**//push temp i**

@i

A = A + 5

D = M

**@SP**

**A = M**

**M = D**

**@SP**

**M = M + 1**

**//pop this i**

**@SP**

**M = M – 1**

**A = M**

**D = M**

@content

M = D

@THIS

D = A

@i

A =A + D

M = D

**//pop temp i**

**@SP**

**M = M – 1**

**A = M**

**D = M**

@i

A = A + 5

M = D

**//pop local i**

@i

D=A

@segment

D=M+D // D is the target address

@address

M=D

@SP

M=M-1

D=M

@address

A=M

M=D

**//pop temp i**

@i

D=A

@5

D=M+D // D is the target address

@address

M=D

@SP

M=M-1

D=M

@address

A=M

M=D

**// push local 1**@iD=A@segment\_addressA=M+DD=M // contains the value to push@SPA=MM=D@SPM=M+1

**//push pointer i**

**@i**

**D = A**

**@THIS**

A = D + A

D = M

@SP

A = M

M = D

@SP

M = M + 1

**//pop pointer i**

**@i**

**D = A**

**@THIS**

D = D + A

@address

M = D

@SP

M = M – 1

A = M

D = M

@address

A = M

M = D

**//pop static i**

@SP

M = M – 1

A = M

D = M

@{file\_name}.{i}

M=D

**//push static i**

@{file\_name}.{i}

D = M

@SP

A = M

M = D

@SP

M = M + 1