

```
int m1[M][N];
int m2[N][M];

int sum_element(int i, int j) {
    return m1[i][j] + m2[j][i];
}

; i - [ebp + 8]
; j - [ebp + 12]
;
;
;
; ...
mov  ecx, dword [ebp + 8]      ; 1
mov  edx, dword [ebp + 12]      ; 2
lea   eax, [8 * ecx]           ; 3
sub  eax, ecx                  ; 4
add  eax, edx                  ; 5
lea   edx, [edx + 4 * edx]      ; 6
add  edx, ecx                  ; 7
mov  eax, dword [m1 + 4 * eax] ; 8
add  eax, dword [m2 + 4 * edx] ; 9
;
;
```

```
enum TargetPosition {
    TARGET_AT_BEGINNING,
    TARGET_AT_MIDDLE,
    TARGET_AT_END
};

switch (targetPosition){
    case TARGET_AT_BEGINNING:
        offsetInWindow = 0;
        break;
    case TARGET_AT_MIDDLE:
        offsetInWindow = MIN (newSize - size, newSize / 2);
        break;
    case TARGET_AT_END:
        offsetInWindow = newSize - size;
        break;
    default:
        _error_code = IllegalData;
        _error_msg  = tr("requested target position"
                        " is not a TargetPosition "
                        " enum member");
}
```

```

enum TargetPosition {
    TARGET_AT_BEGINNING,
    TARGET_AT_MIDDLE,
    TARGET_AT_END
};

if (TARGET_AT_BEGINNING == targetPosition) {
    offsetInWindow = 0;
} else if (TARGET_AT_MIDDLE == targetPosition) {
    offsetInWindow = MIN (newSize - size, newSize / 2);
} else if (TARGET_AT_END == targetPosition) {
    offsetInWindow = newSize - size;
} else {
    _error_code = IllegalData;
    _error_msg  = tr("requested target position"
                     " is not a TargetPosition "
                     " enum member");
}

; в edx помещено значение управляющего выражения
; т.е. targetPosition
cmp  edx, TARGET_AT_BEGINNING
jne .comp2
; код для case TARGET_AT_BEGINNING:
jmp .switch_exit
.comp2:
cmp  edx, TARGET_AT_MIDDLE
jne .comp3
; код для case TARGET_AT_MIDDLE:
jmp .switch_exit
.comp3:
cmp  edx, TARGET_AT_END
jne .default
; код для case TARGET_AT_END:
jmp .switch_exit
.default:
; код для default:
.switch_exit:

```

```

long switch_eg(long x, long y,
long z)
{
    long w = 1;
    switch(x) {
        case 1:      // .L3
            w = y*z;
            break;
        case 2:      // .L4
            w = y/z;
        /* «проверяется» */
        merge:       // .L9
            w += z;
            break;
        case 3:      // .L5
            w += z;
            break;
        case 5:
        case 6:      // .L6
            w -= z;
            break;
        default:     // .L2
            w = 2;
    }
    return w;
}

```

```

switch_eg:
    push    ebp          ;
    mov     ebp, esp     ;
    mov     eax, dword [ebp + 8]; eax = x
    cmp     eax, 6       ;
    ; сравниваем x и 6
    ja     .L2          ;
    ; если >у goto default
    jmp    [.L7 + 4*eax] ; goto *JTab[x]
.L2:   mov     eax, 2       ; w = 2
    jmp    .L8          ; goto done
.L5:   mov     eax, 1       ; x == 3
    jmp    .L9          ; w = 1
    ; goto merge
.L3:   mov     eax, dword [ebp + 16] ; x == 1
    imul   eax, dword [ebp + 12] ; z
    idiv   dword [ebp + 16]      ; w = y*z
    jmp    .L8          ; goto done
    ; x == 2
    mov     edx, dword [ebp + 12]
    mov     eax, edx
    sar    edx, 31
    idiv   dword [ebp + 16]      ; w = y/z

.L9:   add    eax, dword [ebp + 16] ; merge:
    ; w += z
    jmp    .L8          ; goto done

.L6:   mov     eax, 1       ; x == 5, 6
    sub    eax, dword [ebp + 16] ; w = 1
    ; w = 1-z
.L8:   pop    ebp          ; done:
    ret

```