

BB\_Entry  
/\*entry node\*/

BB\_0  
addr 0x0 @asm "add %eax,%ebx"  
label pc\_0x0  
T\_t1:u32 = R\_EBX\_32:u32  
T\_t2:u32 = R\_EAX\_32:u32  
R\_EBX\_32\_126:u32 = R\_EBX\_32:u32 + T\_t2:u32  
R\_CF:bool = R\_EBX\_32\_126:u32 < T\_t1:u32  
T\_temp:u32 = ~T\_t2:u32  
T\_temp\_172:u32 = T\_t1:u32 ^ T\_temp:u32  
T\_temp\_173:u32 = T\_t1:u32 ^ R\_EBX\_32\_126:u32  
T\_temp\_174:u32 = T\_temp\_172:u32 & T\_temp\_173:u32  
R\_OF:bool = high:bool(T\_temp\_174:u32)  
T\_temp\_175:u32 = R\_EBX\_32\_126:u32 ^ T\_t1:u32  
T\_temp\_176:u32 = T\_temp\_175:u32 ^ T\_t2:u32  
T\_temp\_177:u32 = 0x10:u32 & T\_temp\_176:u32  
R\_AF:bool = 0x10:u32 == T\_temp\_177:u32  
T\_temp\_178:u32 = R\_EBX\_32\_126:u32 >> 4:u32  
T\_acc:u32 = T\_temp\_178:u32 ^ R\_EBX\_32\_126:u32  
T\_temp\_179:u32 = T\_acc:u32 >> 2:u32  
T\_acc\_131:u32 = T\_temp\_179:u32 ^ T\_acc:u32  
T\_temp\_180:u32 = T\_acc\_131:u32 >> 1:u32  
T\_temp\_181:u32 = T\_temp\_180:u32 ^ T\_acc\_131:u32  
T\_temp\_182:bool = low:bool(T\_temp\_181:u32)  
R\_PF:bool = ~T\_temp\_182:bool  
R\_SF:bool = high:bool(R\_EBX\_32\_126:u32)  
R\_ZF:bool = 0:u32 == R\_EBX\_32\_126:u32

BB\_1  
addr 0x2 @asm "shl %cl,%ebx"  
label pc\_0x2  
T\_origDEST:u32 = R\_EBX\_32\_126:u32  
T\_origCOUNT:u32 = R\_ECX\_32:u32 & 0x1f:u32  
T\_temp\_183:u32 = R\_ECX\_32:u32 & 0x1f:u32  
R\_EBX\_32\_137:u32 = R\_EBX\_32\_126:u32 << T\_temp\_183:u32  
T\_temp\_184:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_185:u32 = 0x20:u32 - T\_origCOUNT:u32  
T\_temp\_186:u32 = T\_origDEST:u32 >> T\_temp\_185:u32  
T\_temp\_187:bool = low:bool(T\_temp\_186:u32)  
R\_CF\_138:bool = if T\_temp\_184:bool then R\_CF:bool else T\_temp\_187:bool  
T\_temp\_188:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_189:bool = T\_origCOUNT:u32 == 1:u32  
T\_temp\_190:bool = high:bool(R\_EBX\_32\_137:u32)  
T\_temp\_191:bool = T\_temp\_190:bool ^ R\_CF\_138:bool  
T\_temp\_192:bool = unknown "OF undefined after shift":bool  
T\_temp\_193:bool =  
if T\_temp\_189:bool then T\_temp\_191:bool else T\_temp\_192:bool  
R\_OF\_139:bool = if T\_temp\_188:bool then R\_OF:bool else T\_temp\_193:bool  
T\_temp\_194:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_195:bool = high:bool(R\_EBX\_32\_137:u32)  
R\_SF\_140:bool = if T\_temp\_194:bool then R\_SF:bool else T\_temp\_195:bool  
T\_temp\_196:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_197:bool = 0:u32 == R\_EBX\_32\_137:u32  
R\_ZF\_141:bool = if T\_temp\_196:bool then R\_ZF:bool else T\_temp\_197:bool  
T\_temp\_198:u32 = R\_EBX\_32\_137:u32 >> 4:u32  
T\_acc\_113:u32 = T\_temp\_198:u32 ^ R\_EBX\_32\_137:u32  
T\_temp\_199:u32 = T\_acc\_113:u32 >> 2:u32  
T\_acc\_113\_143:u32 = T\_temp\_199:u32 ^ T\_acc\_113:u32  
T\_temp\_200:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_201:u32 = T\_acc\_113\_143:u32 >> 1:u32  
T\_temp\_202:u32 = T\_temp\_201:u32 ^ T\_acc\_113\_143:u32  
T\_temp\_203:bool = low:bool(T\_temp\_202:u32)  
T\_temp\_204:bool = ~T\_temp\_203:bool  
R\_PF\_144:bool = if T\_temp\_200:bool then R\_PF:bool else T\_temp\_204:bool  
T\_temp\_205:bool = T\_origCOUNT:u32 == 0:u32  
T\_temp\_206:bool = unknown "AF undefined after shift":bool  
R\_AF\_145:bool = if T\_temp\_205:bool then R\_AF:bool else T\_temp\_206:bool

BB\_2  
addr 0x4 @asm "jb 0x0000000000000007"  
label pc\_0x4  
cjmp R\_CF\_138:bool, 7:u32, "nocjmp0"

R\_CF\_138:bool == false

BB\_3  
label nocjmp0  
addr 0x6 @asm "inc %eax"  
label pc\_0x6  
T\_t:u32 = R\_EAX\_32:u32  
R\_EAX\_32\_163:u32 = R\_EAX\_32:u32 + 1:u32  
T\_temp\_207:u32 = -2:u32  
T\_temp\_208:u32 = T\_t:u32 ^ T\_temp\_207:u32  
T\_temp\_209:u32 = T\_t:u32 ^ R\_EAX\_32\_163:u32  
T\_temp\_210:u32 = T\_temp\_208:u32 & T\_temp\_209:u32  
R\_OF\_164:bool = high:bool(T\_temp\_210:u32)  
T\_temp\_211:u32 = R\_EAX\_32\_163:u32 ^ T\_t:u32  
T\_temp\_212:u32 = T\_temp\_211:u32 ^ 1:u32  
T\_temp\_213:u32 = 0x10:u32 & T\_temp\_212:u32  
R\_AF\_165:bool = 0x10:u32 == T\_temp\_213:u32  
T\_temp\_214:u32 = R\_EAX\_32\_163:u32 >> 4:u32  
T\_acc\_115:u32 = T\_temp\_214:u32 ^ R\_EAX\_32\_163:u32  
T\_temp\_215:u32 = T\_acc\_115:u32 >> 2:u32  
T\_acc\_115\_167:u32 = T\_temp\_215:u32 ^ T\_acc\_115:u32  
T\_temp\_216:u32 = T\_acc\_115\_167:u32 >> 1:u32  
T\_temp\_217:u32 = T\_temp\_216:u32 ^ T\_acc\_115\_167:u32  
T\_temp\_218:bool = low:bool(T\_temp\_217:u32)  
R\_PF\_168:bool = ~T\_temp\_218:bool  
R\_SF\_169:bool = high:bool(R\_EAX\_32\_163:u32)  
R\_ZF\_170:bool = 0:u32 == R\_EAX\_32\_163:u32

R\_CF\_138:bool == true

BB\_4  
addr 0x7 @asm "inc %ebx"  
label pc\_0x7  
R\_OF\_152:bool = phi(R\_OF\_139:bool, R\_OF\_164:bool)  
R\_EAX\_32\_151:u32 = phi(R\_EAX\_32:u32, R\_EAX\_32\_163:u32)  
R\_PF\_150:bool = phi(R\_PF\_144:bool, R\_PF\_168:bool)  
R\_SF\_149:bool = phi(R\_SF\_140:bool, R\_SF\_169:bool)  
T\_t\_148:u32 = phi(T\_t\_118:u32, T\_t:u32)  
R\_AF\_147:bool = phi(R\_AF\_145:bool, R\_AF\_165:bool)  
R\_ZF\_146:bool = phi(R\_ZF\_141:bool, R\_ZF\_170:bool)  
T\_t\_116:u32 = R\_EBX\_32\_137:u32  
R\_EBX\_32\_154:u32 = R\_EBX\_32\_137:u32 + 1:u32  
T\_temp\_219:u32 = -2:u32  
T\_temp\_220:u32 = T\_t\_116:u32 ^ T\_temp\_219:u32  
T\_temp\_221:u32 = T\_t\_116:u32 ^ R\_EBX\_32\_154:u32  
T\_temp\_222:u32 = T\_temp\_220:u32 & T\_temp\_221:u32  
R\_OF\_155:bool = high:bool(T\_temp\_222:u32)  
T\_temp\_223:u32 = R\_EBX\_32\_154:u32 ^ T\_t\_116:u32  
T\_temp\_224:u32 = T\_temp\_223:u32 ^ 1:u32  
T\_temp\_225:u32 = 0x10:u32 & T\_temp\_224:u32  
R\_AF\_156:bool = 0x10:u32 == T\_temp\_225:u32  
T\_temp\_226:u32 = R\_EBX\_32\_154:u32 >> 4:u32  
T\_acc\_117:u32 = T\_temp\_226:u32 ^ R\_EBX\_32\_154:u32  
T\_temp\_227:u32 = T\_acc\_117:u32 >> 2:u32  
T\_acc\_117\_158:u32 = T\_temp\_227:u32 ^ T\_acc\_117:u32  
T\_temp\_228:u32 = T\_acc\_117\_158:u32 >> 1:u32  
T\_temp\_229:u32 = T\_temp\_228:u32 ^ T\_acc\_117\_158:u32  
T\_temp\_230:bool = low:bool(T\_temp\_229:u32)  
R\_PF\_159:bool = ~T\_temp\_230:bool  
R\_SF\_160:bool = high:bool(R\_EBX\_32\_154:u32)  
R\_ZF\_161:bool = 0:u32 == R\_EBX\_32\_154:u32

BB\_Exit  
/\*exit node\*/