Stack before execution of fgets(guess, 100, stdin)

Label	Value	Address
return address to main	0x08048a08	0xffffcec
ebp of previous stack frame	0x080b000a	0xffffce0
ans (local variable) generated by rand()	0x0000054	0xffffcdc
g (local variable)	0xffffd008	0xffffcd8
random[2..5]	0x0000008e	0xffffcd4
random[0..1]	0x080e	0xffffcd2
guess[14..15]	0xb00c	0xffffcfd0
guess[10..13]	0x080481a8	0xffffcfcc
guess[6..9]	0x00000000	0xffffcfc8
guess[2..5]	0x080ec024	0xffffcfc4
guess[0..1]	0x080d	0xffffcfc2
esp →	0x637c	0xffffcfc0

Stack after execution of fgets (buffer overflow)

Label	Value	Address
return address to main	0x08048a08	0xffffcec
ebp of previous stack frame	0x080b000a	0xffffce0
ans (local variable)	0x00000061	0xffffcdc
g (local variable)	0x32323232	0xffffcd8
random[2..5]	0x31313131	0xffffcd4
random[0..1]	0x3131	0xffffcd2
guess[14..15]	0x3131	0xffffcfd0
guess[10..13]	0x31313131	0xffffcfcc
guess[6..9]	0x31313131	0xffffcfc8
guess[2..5]	0x31313100	0xffffcfc4
guess[0..1]	0x3739	0xffffcfc2
esp →	0x637c	0xffffcfc0

Final Stack state after execution of atol (winning the game)

Label	Value	Address
return address to main	0x08048a08	0xffffcec
ebp of previous stack frame	0x080b000a	0xffffce0
ans (local variable)	0x00000061	0xffffcdc
g (local variable)	0x00000061	0xffffcd8
random[2..5]	0x31313131	0xffffcd4
random[0..1]	0x3131	0xffffcd2
guess[14..15]	0x3131	0xffffcfd0
guess[10..13]	0x31313131	0xffffcfcc
guess[6..9]	0x31313131	0xffffcfc8
guess[2..5]	0x31313100	0xffffcfc4
guess[0..1]	0x3739	0xffffcfc2
esp →	0x637c	0xffffcfc0