What do the following functions return?

1.
```
0000000000000000 <foo1>:
   0:   29 f7                   sub    %esi,%edi
   2:   89 f8                   mov    %edi,%eax
   4:   c3                      retq
```

2.
```
0000000000000000 <foo2>:
   0:   85 f6                   test   %esi,%esi
   2:   7e 07                   jle    b <foo2+0xb>
   4:   0f af c7                imul   %edi,%eax
   7:   ff ce                   dec    %esi
   9:   75 f9                   jne    4 <foo2+0x4>
   b:   f3 c3                   repz   retq
```

3.
```
0000000000000000 <foo3>:
   0:   39 f7                   cmp        %esi,%edi
   2:   0f 4d f7                cmovge %edi,%esi
   5:   89 f0                   mov    %esi,%eax
   7:   c3                      retq
```

4.
```
0000000000000000 <foo4>:
   0:   31 c0                   xor    %eax,%eax
   2:   31 f6                   xor    %esi,%esi
   4:   39 f8                   cmp    %edi,%eax
   6:   7d 1c                   jge    24 <foo4+0x24>
   8:   85 f6                   test   %esi,%esi
   a:   7e 12                   jle    1e <foo4+0x1e>
   c:   8d 0c f5 00 00 00 00    lea    0x0(,%rsi,8),%ecx
  13:   89 f2                   mov    %esi,%edx
  15:   01 c8                   add    %ecx,%eax
  17:   83 c1 02                add    $0x2,%ecx
  1a:   ff ca                   dec    %edx
  1c:   75 f7                   jne    15 <foo4+0x15>
  1e:   ff c6                   inc    %esi
  20:   39 fe                   cmp    %edi,%esi
  22:   7c e4                   jl     8 <foo4+0x8>
  24:   f3 c3                   repz   retq
```

```c
int foo4(int n)
{
   int total = 0;
   int i,j;
   for (i = 0; i < n; i++) {
       for (j = 0; _____; j++) {
          total += _____;
       }
   }
   return total;
}
```