

1)

```
21      total = i;  
(gdb) print &i  
$6 = (int *) 0xfffffffffeec8  
(gdb) print &total  
$7 = (int *) 0xfffffffffeecc
```

$0xfffffffffeec8 < 0xfffffffffeecc \rightarrow \&i < \&total$

Since the stack goes from higher addresses to lower addresses, the total is on top and i is on the bottom.

So, this compiler, adds y closer to the top of the stack.

2)

```
21      total = i;  
(gdb) print &i  
$6 = (int *) 0xfffffffffeec8  
(gdb) print &total  
$7 = (int *) 0xfffffffffeecc
```

3) Just by observing memory addresses of i and total, new variables get added to higher memory addresses.