|       | Absolute<br>Address | Stack<br>Value | Description             | Function<br>Name      | Notes                           |  |
|-------|---------------------|----------------|-------------------------|-----------------------|---------------------------------|--|
| BP+6h | FAFh                | 3000h          | Function Return Address | Startup               |                                 |  |
| BP    | FA9h                | 0              | Previous Frame Address  |                       |                                 |  |
| BP+12 | FA5h                | ??             | Return Object (int)     |                       |                                 |  |
| BP+6  | F9Fh                | FA9h           | Function Return Address |                       |                                 |  |
| BP    | F99h                | FA9h           | Previous Frame Address  |                       |                                 |  |
| BP-5  | F94h                | AB3h           | Long Val                | int main()            |                                 |  |
| BP+11 | F8Fh                | ??             | Return Object (long)    |                       |                                 |  |
| BP+6  | F89h                | AB3h           | Function Return Address |                       |                                 |  |
| BP    | F83h                | F99h           | Previous Frame Address  |                       |                                 |  |
| BP-5  | F7Eh                | 118h           | Long res                | long ready()          |                                 |  |
| BP+29 | F79h                | ??             | Return Object (long)    |                       |                                 |  |
| BP+24 | F74h                | 84             | Long x                  | long gcd()<br>Level 0 | long gcd(84, 63) -> gcd(63, 21) |  |
| BP+18 | F6Fh                | 63             | Long y                  |                       |                                 |  |
| BP+6  | F69h                | 118h           | Function Return Address |                       |                                 |  |
| BP    | F63h                | F7Eh           | Previous Return Address |                       |                                 |  |
| BP+29 | F5Eh                | ??             | Return Object (long)    |                       |                                 |  |
| BP+24 | F59h                | ??             | Long x = 63             | long gcd()<br>level 1 |                                 |  |
| BP+18 | F54h                | ??             | Long y = 21             |                       |                                 |  |
| BP+6  | F4Eh                | 7C6h           | Function Return Address |                       |                                 |  |
| BP    | F48h                | F63h           | Previous Return Address |                       |                                 |  |
| BP+29 | F43h                | ??             | Return Object (long)    | long gcd()            |                                 |  |
| BP+24 | F3Eh                | ??             | Long x = 21             |                       |                                 |  |
| BP+18 | F39h                | ??             | Long y = 0              |                       |                                 |  |
| BP+6  | F33h                | 7C6h           | Function Return Address |                       |                                 |  |
| BP    | F2Dh                | F48h           | Previous Return Address | level 2               |                                 |  |
|       |                     |                |                         | Long gcd(x,y)         | ) -> gcd(y, x%y)                |  |
|       |                     |                | int 4 bytes             |                       | Use Pascal                      |  |

| long 5 bytes                | Left to Right -> |            |     |
|-----------------------------|------------------|------------|-----|
| pointers 6 bytes            |                  |            |     |
| 545L 50DL 400 LL            |                  |            |     |
| FAFh - F2Dh = 130 addresses |                  |            |     |
| Туре                        | Bits             | Occurances | Sum |
| Return Addresses            | 6                | 6          | 36  |
| Previous Frames             | 6                | 6          | 36  |
| Long variables              | 5                | 8          | 40  |
| Int                         | 4                | 1          | 4   |
|                             |                  |            |     |
|                             |                  | 14         | 116 |

<sup>\*\*</sup> Note: Items in green/grey are provided by instructor. Items in darker blue are "automatic" pointing to upper previous frame address