1. a) $x = 6$, $y = 2$, $z = 3$

  b) $x = 6$, $y = 5$, $z = 3$

  c) $x = 6$, $y = 5$, $z = 3$

  d) $x = 6$, $y = 2$, $z = 3$

  e) $x = 3$, $y = 2$, $z = 3$

  f) $x = 4$, $y = 2$, $z = 3$

2. a) $Sum = 10$; As the figure below:

$$x \longrightarrow \boxed{2} \; 4$$
$$i \nearrow$$

$\Rightarrow$ Sum = Sum + bar(x) $= \cancel{8} = 10$

  b) $Sum = 12$; A   below:

$$x \longrightarrow \boxed{2} \; 4 \; 8$$
$$i \nearrow$$
$$Sum = bar(x) = 8$$

$\Rightarrow$

Sum = Sum + x
So Sum = $8 + 4 = 12$

3.   a) before 12

Sub 3 {
```
| local vars:   B, D           |
| parameters:   F = E          |
|     Dynamic  link            |
|     Static   Link            |
|   return address = Line 16   |
```

Sub2 {
```
| Local vars:   None           |
| parameters:   E = 10         |
|     Dynamic  Link            |
|     Static   Link            |
|   return address = Line 19   |
```
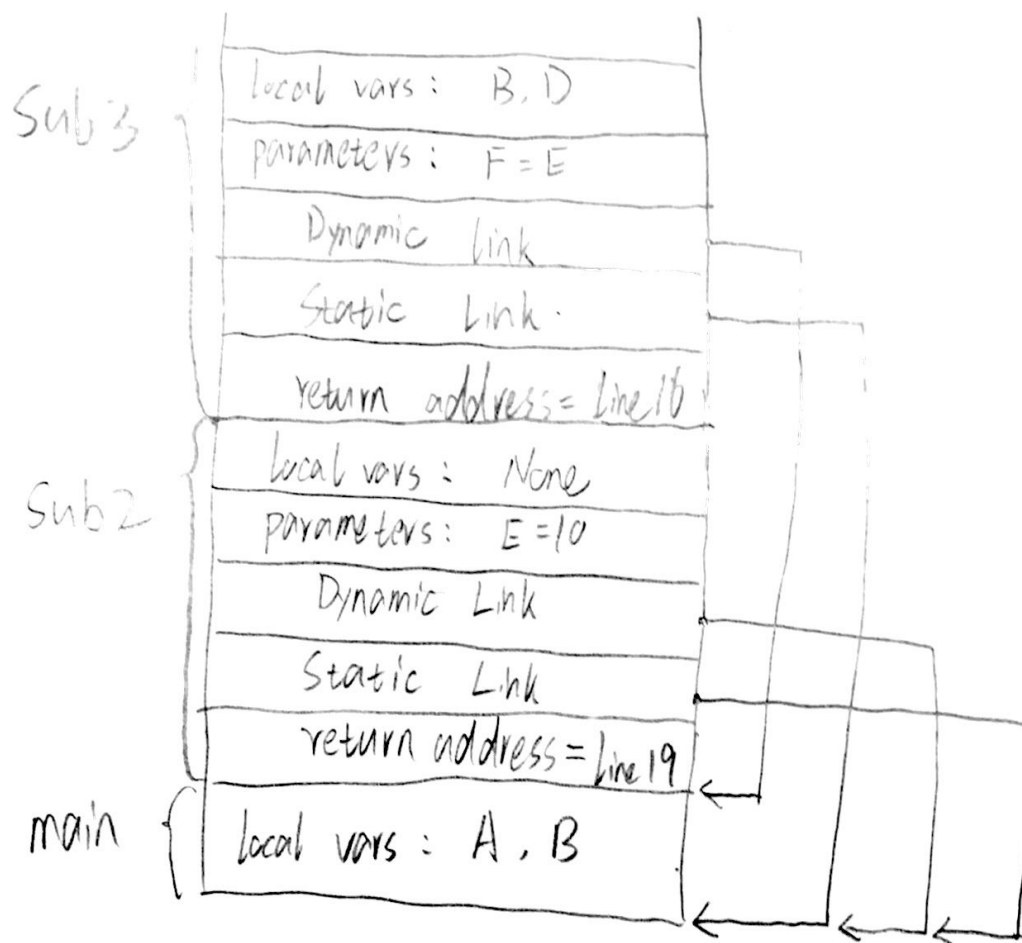
main {
```
| Local vars : A , B           |
```

b) before 6   (sub 3, sub2, main are same as above)

```
| Local vars : D               |
| parameters:   C = 100        |
|     Dynamic  Link            |
|     Static   Link            |
|   return address = Line 13   |
```

Sub3 {

Sub2 {

main {