

R2) Mi carnet es 15-10627 entonces  $X=6$   
 $Y=2$  y  $Z=7$

a) Algoritmo estatico y asociacion profunda

```
Int a = 7, b = 2;
sub meha(int c) {
    b := a + c;
}
```

Imprime

8	49
8	28
8	7
-22	-27

```
Sub x(int b, sub go, sub ku) {
    sub meha(int c) {
        a := b - c;
    }
    int a = 8
```

```
if (b < 3 * (7)) {
    K(b + 3 * (7), meha, go);
} else if (b < 6 * (7)) {
    K(b + 3 * (7), ku, meha);
} else {
    int b = 7 - b;
    go(a + b);
    ku(a - b);
}
```

```
print(a, b);
```

```
K(a, meha, meha);
print(a, b);
```

Meha<sub>g</sub>

Meha<sub>g</sub>

Ku	17	C	50
go	16	C	-34
	15	b	-42
	14	a	8
K	13	Meha	sub
	12	Ku	meha <sub>g</sub>
	11	go	Ku <sub>7</sub>
	10	b	49
	9	a	8
	8	Meha	sub
K	7	Ku	go <sub>1</sub>
	6	go	meha <sub>3</sub>
	5	b	28
	4	a	8
	3	Meha	sub
K	2	Ku	meha <sub>g</sub>
	1	go	meha <sub>g</sub>
	0	b	7

a 6  
b 5

a 6  
b 0

a 6  
b 6

Global
a 7 / -22
b 2 / -27
meha sub
K sub



b) Alcanza dinámico y asociación profunda.

```
int a = 7, b = 2;
sub meha(int c) {
    b := a + c;
}
```

Imprime

8	4a
-22	28
8	7
7	-27

```
sub k(int b, sub go, sub ku) {
    sub meha(int c) {
        a := b - c;
    }
}
```

```
int a = 8
if (b < 3 * (7)) {
    k(b + 3 * (7), meha, go);
} else if (b < 6 * (7)) {
    k(b + 3 * (7), ku, meha);
} else {
    int b = 7 - b;
    go(a + b);
    ku(a - b);
}
print(a, b);
```

meha 8	Ku 17	C 50
meha 6	go 16	C -34
	15	b -42
	14	a 8
K	13	meha sub
	12	Ku meha 8
	11	go Ku 7
	10	b 49
	9	a 8 / -22
	8	meha sub
K	7	Ku go 1
	6	go meha 3
	5	b 28
	4	a 8
	3	meha sub
K	2	Ku meha 6
	1	go meha 6
	0	b 7

→

a	9
b	5

→

a	4
b	0

→

a	6
b	6

Global
a 7
b 2 / -27
meha sub
K sub

## C) Alcance estatico y asociación superficial.

```

int a = 3, b = 2;
sub meha (int c) {
    b := a + c;
}

```

Imprime

-60	49
8	28
8	7
7	2

```

sub k (int b, sub go, sub ku) {
    sub meha (int c) {
        a := b - c;
    }
}

```

```

int a = 8
if (b < 3 * (7)) {
    k (b + 3 * (7), meha, go);
} else if (b < 6 * (7)) {
    k (b + 3 * (7), ku, meha);
} else {
    int b = 7 - b;
    go (a + b);
    ku (a - b);
}
print(a, b);

```

meha	ku	17	34
meha	go	16	C-34
		15	b -42 / -26
		14	a 8 / -60
	k	13	meha sub
		12	meha 8
		11	ku 7
		10	b 49
		9	a 8
		8	meha sub
	k	7	ku go 1
		6	go meha 3
		5	b 28
		4	a 8
	k	3	meha sub
		2	ku meha b
		1	go meha b
		0	b 7

a 14  
b 15

a 14  
b 15

Global
a 7
b 2
meha sub
k sub



# d) Algoritmo dinámico y asociación superficial

```

int a=7, b=2;
sub meha(int c) {
    b:=a+c;
}

```

Imprime

-60	49
8	28
8	7
7	2

```

sub k(int b, subgo, sub ku) {
    sub meha(int c) {
        a:=b-c;
    }
}

```

```

int a=8
if (b<3*(7)) {
    k(b+3*(7), meha, go);
} else if (b<6*(7)) {
    k(b+3*(7), ku, meha);
} else {
    int b=7-b;
    go(a+b);
    ku(a-b);
}
print(a,b);
}

```

meha 8	Ku 17	C 34
meha 6	go 16	C -34
	15	b -42 / -26
	14	a 8 / -60
	K 13	Meha sub
	12	Ku meha 8
	11	go Ku 7
	10	b 49
	9	a 8
	8	Meha sub
	K 7	Ku go 1
	6	go meha 3
	5	b 28
	4	a 8
	K 3	Meha sub
	2	Ku meha 6
	1	go Meha 6
	0	b 7

a 14  
b 15

a 14  
b 15

Global
a 7
b 2
meha sub
K sub