

Write the results of the following program execution:

```
#include <stdio.h>

int reset(void);
int next(int);
int last(int);
int new(int);

int i=1;

void main(void)
{
    auto int i,j=0;

    i=reset();
    /* Local i kept equal to the same value.
       Function calls do not change it.
       And exactly that local i value is printed
       and passed to the functions (as their arguments
       value) during the consecutive calls. */
    do {
        printf("i = %d\t",i),
        printf("j = %d\t",j), putchar('\n');
        printf("next(i) = %d\t",next(i)),
        putchar('\n');
        printf("last(i) = %d\t",last(i)),
        putchar('\n');
        printf("new(i+j) = %d\t",new(i+j)),
        putchar('\n');
        j++;
    } while (j<=2);
}

int reset(void)
{
    return i--;
    /* Global i is decreased after
       setting the returning value of the
       reset function, because --
       operator is from the right-hand side
       of i */
}

int next(int j)
{
    return (j-=i--);
    /* Global i is decreased after
       assignement since -- operator
       is from the right-hand side of
       i */
}

int last(int j)
{
    static int i=11;
    /* Value of local i kept between
       the subsequent calls due to the
       static declaration of i */
    return (i+=--j);
    /* New local i set to value
       returned by function last.
       Decrementation of j takes place
       before assignement since it is from
       the left-hand side of j */
}

int new(int k)
{
    auto int j=4;
    return (i=j-=k);
    /* New global i equal to value
       returned by function new.
       To i is assigned the same value
       as to j */
}
```

Results:

```
i = 1 j = 0 (local i set to the global one
             before decrementation)
next(i) = 1
last(i) = 11
new(i+j) = 3
i = 1 j = 1
next(i) = -2
last(i) = 11
new(i+j) = 2
i = 1 j = 2
next(i) = -1
last(i) = 11
new(i+j) = 1
```