

01001111 01110011 01101110 01101111  
01110110 01101001 00100000 01110000  
01110010 01101111 01100111 01110010  
01100001 01101101 01101001 01110010  
01100001 01101110 01101010 01100001

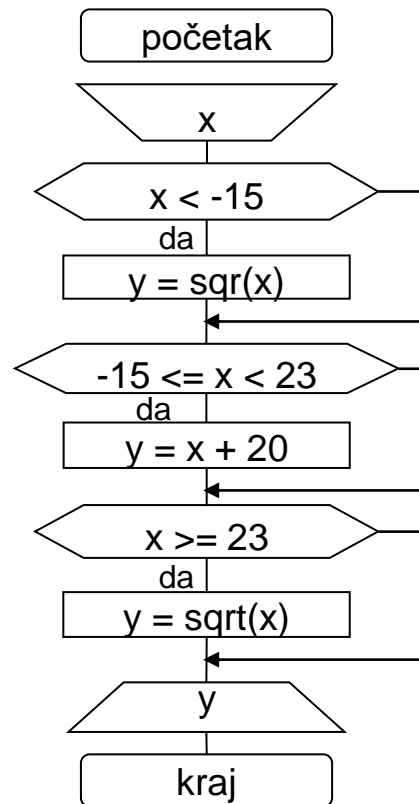


# OSNOVI PROGRAMIRANJA

## VEŽBE 2

- Napisati algoritam i program koji za uneti ceo broj  $x$  izračunava vrednost broja  $y$ , ako je

$$y = \begin{cases} x^2 & x < -15 \\ x + 20 & -15 \leq x < 23 \\ \sqrt{x} & x \geq 23 \end{cases}$$



```

#include <stdio.h>
#include <math.h>

main()
{
    int x;
    float y;

    scanf("%d", &x);

    if ( x < -15)
        y = x * x;

    if ( x >= -15 && x < 23)
        y = x + 20;

    if ( x >= 23)
        y = sqrt(x);

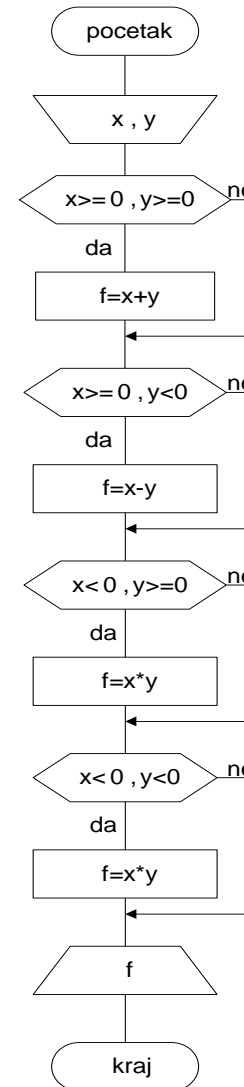
    printf("y = %7.2f", y);
}

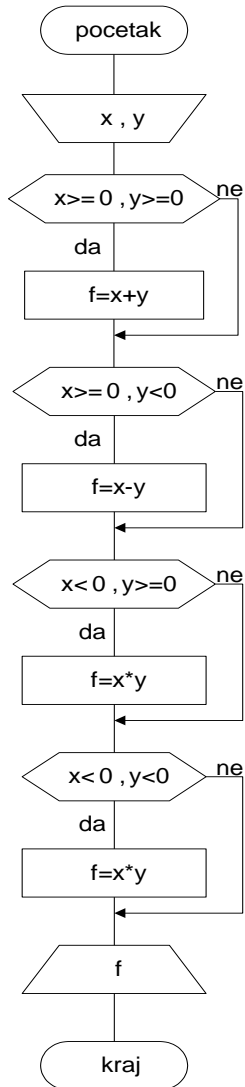
```

- Sastaviti program koji računa vrednost funkcije  $f(x,y)$  gde se vrednosti promenljivih  $x$  i  $y$  unose sa ulaza,

$$f(x, y) = \begin{cases} x + y & ; \quad x \geq 0, \quad y \geq 0 \\ x - y & ; \quad x \geq 0, \quad y < 0 \\ x * y & ; \quad x < 0, \quad y \geq 0 \\ x / y & ; \quad x < 0, \quad y < 0 \end{cases}$$

$$f(x, y) = \begin{cases} x + y & ; \quad x \geq 0, \quad y \geq 0 \\ x - y & ; \quad x \geq 0, \quad y < 0 \\ x * y & ; \quad x < 0, \quad y \geq 0 \\ x / y & ; \quad x < 0, \quad y < 0 \end{cases}$$





```

#include <stdio.h>

main()
{
    float x, y, f;

    scanf("%f%f", &x, &y);

    if( x >= 0 && y >= 0 )
        f = x + y;

    if( x >= 0 && y < 0 )
        f = x - y;

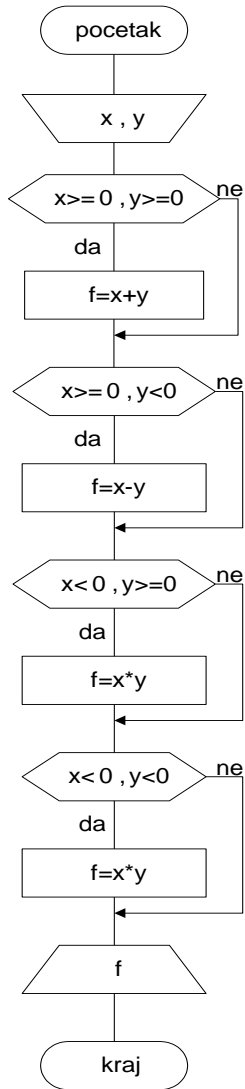
    if( x < 0 && y >= 0 )
        f = x * y;

    if( x < 0 && y < 0 )
        f = x / y;

    printf("f(%5.2f, %5.2f) = %5.2f", x, y, f );
}
  
```



# IF ... THEN ... ELSE IF... ELSE PRIMER 2



```
#include <stdio.h>

main()
{
    float x, y, f;

    scanf("%f%f", &x, &y);

    if( x >= 0 && y >= 0 )
        f = x + y;
    else if( x >= 0 && y < 0 )
        f = x - y;
    else if( x < 0 && y >= 0 )
        f = x * y;
    else
        f = x / y;

    printf("f(%5.2f, %5.2f) = %5.2f", x, y, f );
}
```

- Napisati program koji za tri uneta cela broja ispisuje zbir i proizvod onih koji su deljivi sa 3.

```
#include <stdio.h>

main()
{
    int a, b, c, s, p;

    scanf("%d%d%d", &a, &b, &c);

    s = 0;
    p = 1;

    if ( a % 3 == 0 )
    {
        s = s + a;
        p = p * a;
    }
}
```

```
    if ( b % 3 == 0 )
    {
        s = s + b;
        p = p * b;
    }

    if ( c % 3 == 0 )
    {
        s = s + c;
        p = p * c;
    }

    printf("s = %7d \n", s);

    if ( p != 1 )
        printf("p = %7d", p);
}
```

- Napisati program koji za unetu vrednost promenljive  $x$  računa  $y$  na sledeći način:

$$y(x) = \begin{cases} x^2, & x < 0 \\ \frac{x}{x-1}, & x \geq 0 \end{cases}$$

```

#include <stdio.h>

main()
{
    float x, y;

    scanf("%f", &x);

    if ( x != 1 )
    {
        if ( x < 0 )
            y = x * x;
        else
            y = x / ( x - 1 );

        printf("y = %f", y);
    }
    else
        printf("Deljenje nulom nije dozvoljeno!");
}

```