

TD N°01 language C++

Exercise 1 :

Énoncé

Quels résultats fournit le programme suivant :

```
#include <iostream>
using namespace std ;
main ()
{
    int i, j, n ;
    i = 0 ; n = i++ ;
    cout << "A : i = " << i << " n = " << n << "\n" ;

    i = 10 ; n = ++ i ;
    cout << "B : i = " << i << " n = " << n << "\n" ;
    i = 20 ; j = 5 ; n = i++ * ++ j ;
    cout << "C : i = " << i << " j = " << j << " n = " << n << "\n" ;
    i = 15 ; n = i += 3 ;
    cout << "D : i = " << i << " n = " << n << "\n" ;

    i = 3 ; j = 5 ; n = i *-- j ;
    cout << "E : i = " << i << " j = " << j << " n = " << n << "\n" ;
}
```

Exercise 2 :

Énoncé

Quels résultats fournira ce programme :

```
#include <iostream>
using namespace std ;
main()
{
    int n=10, p=5, q=10, r ;

    r = n == (p = q) ;
    cout << "A : n = " << n << " p = " << p << " q = " << q
        << " r = " << r << "\n" ;

    n = p = q = 5 ;
    n += p += q ;
    cout << "B : n = " << n << " p = " << p << " q = " << q << "\n" ;

    q = n < p ? n++ : p++ ;
    cout << "C : n = " << n << " p = " << p << " q = " << q << "\n" ;

    q = n > p ? n++ : p++ ;
    cout << "D : n = " << n << " p = " << p << " q = " << q << "\n" ;
}
```

Exercise 3 :**Énoncé**

Quels résultats fournira ce programme :

```
#include <iostream>
using namespace std ;
main()
{   int n, p, q ;

    n = 5 ; p = 2 ;                               /* cas 1 */
    q = n++ > p || p++ != 3 ;
    cout << "A : n = " << n << " p = " << p << " q = " << q << "\n" ;

    n = 5 ; p = 2 ;                               /* cas 2 */
    q = n++ < p || p++ != 3 ;
    cout << "B : n = " << n << " p = " << p << " q = " << q << "\n" ;

    n = 5 ; p = 2 ;                               /* cas 3 */
    q = ++n == 3 && ++p == 3 ;
    cout << "C : n = " << n << " p = " << p << " q = " << q << "\n" ;

    n = 5 ; p = 2 ;                               /* cas 4 */
    q = ++n == 6 && ++p == 3 ;
    cout << "D : n = " << n << " p = " << p << " q = " << q << "\n" ;
}
```