

CvP - Werkcollege 6

Exercise 1 What is a cast?

Exercise 2 What is an overloaded operator?

Exercise 3 Define narrowing and widening conversions.

Exercise 4 In JavaScript, what is the difference between `==` and `===`?

Exercise 5 What is a mixed-mode expression?

Exercise 6 What are the advantages of referential transparency?

Exercise 7 Would it be a good idea to eliminate all operator precedence rules and require parentheses to show the desired precedence in expressions? Why or why not?

Exercise 8 Describe a situation in which the add operator in a programming language would not be commutative.

Exercise 9 Describe a situation in which the add operator in a programming language would not be associative.

Exercise 10 Let the function `fun` be defined as

```
int fun(int *k) {  
    *k += 4;  
    return 3 * (*k) - 1;  
}
```

Suppose `fun` is used in a program as follows:

```
void main() {  
    int i = 10, j = 10, sum1, sum2;  
    sum1 = (i / 2) + fun(&i);  
    sum2 = fun(&j) + (j / 2);  
}
```

What are the values of `sum1` and `sum2`

- (a) if the operands in the expressions are evaluated left to right?
- (b) if the operands in the expressions are evaluated right to left?

Exercise 11 Explain how the coercion rules of a language affect its error detection.