15. Дървовидна структура от обекти от полиморфен тип. Пример с логически изрази.

Expr

virt Expr* clone() const=0;
virt bool eval(const Bind&) const=0;
virt void extractVars(Bind&) const=0;
virt ~Expr();
def(), k.k, otn = =delete;

Variable
char _ch;
Variable(char);
bool eval(const Bind&) const override;
void extractVars(Bind&) const override;

BinaryOperation
Expr* _l, _r;
BinaryOperation(Expr*, Expr*)
void extractVars(Bind&) const override;
~BinaryOperation();

UnaryOperation
Expr* _expr;
UnaryOperation(Expr*);
void extractVars(Bind&) const override;
~UnaryOperation

Conjuction

Disjunction

Implication

Negate
Negate(Expr*);
bool eval(const Bind&) const override;
Expr* clone() const override

BooleanInterpretation(Bi)
bool _grammar[26]{false};
bool getCharAt(char) const;
void setCharAt(bool, char);
void modify(int);
size_t count() const;

ExprInterpretation
Expr* _root;
// Big 6
ExprInterpretation(const char*)
bool isTautology() const;
bool isContradiction() const
private:
Expr* extractFromStr(const char*) ⟹ ExprFactory
bool combinator(bool) const

ExprFactory
static Expr* create(StringView);