1 Programs and Expressions

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3.1 String Indexes

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3.4 String Scanning

3.5 Pattern Matching

Unicon has a SNOBOL4 type pattern matching facility. Combined with the string scanning facilities they are highly flexible and readable string processing facilities. In this section you will

learn

- how to initialize a pattern match
- how to construct a pattern
- Unicon's pattern operators
- Unicon's primitive pattern functions

pattern matching

A pattern match operator operands consist of a *subject* string and a pattern which was defined earlier. It is expressed in the form:

```
subject ?? pattern
```

The `??` operator initializes the pattern match, searches the *subject* string on the left for the first occurrence of the pattern on the right. This is an unanchord pattern match. If found, it suspends the substring matching the pattern. Should there be more than one occurrence of the pattern, it functions as a generator suspending each subsequent matching substring as requested.

When a pattern match is part of an expression in the string scanning environment the unary `=` operator is used. In the following example the string scanning environment is initialized with the `?` operator. The `&pos` is set to 1 or the beginning of the *subject* string. An anchored pattern match is performed on the subject string from the `&pos`. In anchored pattern matches, the match must begin at the current `&pos` otherwise it fails. If it succeeds, then `result` will be assigned the matching substring.

```
subject ? {
   result := =pattern
```

```
}
```