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1 Module Bred : The main project.

Entrypoint and working with command line arguments.

```
type output = Pervasives.out_channel -> bytes -> int -> int -> unit
```

Output could be to stdout or to a named file.

```
val learn : string -> string
```

Take filename and return it's content.

```
val main : int -> 'a -> string list -> 'b -> unit
```

Entrypoint for the bred program.

```
val deep : int Cmdliner.Term.t
```

CLI parameter to set deep of learning for the markov's chain.

```
val out : output Cmdliner.Term.t
```

CLI parameter to set output file/stdout.

```
val files : string list Cmdliner.Term.t
```

CLI parameter for list of files for chain's education.

```
val num : int Cmdliner.Term.t
```

CLI parameter to limit length of output.

```
val main_t : unit Cmdliner.Term.t
```

Build a CLI handler.

```
val info : Cmdliner.Term.info
```

Build an info page.

2 Module Read : There is module Read for transformation raw text to a convinient for markov's chains learning presentation.

```
val string_of_file : string -> string
    Take a filename and return a string with it's content.
```

3 Module Write : The text generator module.

```
val generate_text : Markov.ptable -> string
    Take a markov's chain and generate output.
```

4 Module Markov : There is constructing markov's chain.

```
type distribution = {
    total : int ;
    amounts : (string * int) list ;
}
    The presentation for a word's distribution.
```

```
type ptable = {
    prefix_length : int ;
    table : (string list, distribution) Hashtbl.t ;
}
    The type for a Markov's chain.
```

```
val is_word : char -> bool
    Check that it's a alphanumerical symbol.
```

```
val is_punctuation : char -> bool
    Check that it's a punctuation.
```

```
val is_sentence_separator : char -> bool
    Check that it's a separator between sentencies.
```

```
val split_word : string -> string list
    Split a string to a list of words.
```

```
val start : int -> string list
    Make the list with few "START" words according to depth of chain's learning.
```

```

val shift : 'a list -> 'a -> 'a list
    Remove first element of a list and add new one to the end 1; 2; 3 4 → 2; 3; 4

val add_to : ('a, 'b list) Hashtbl.t -> 'a -> 'b -> unit
    Add new word to a chain.

val compute_distribution : string list -> distribution
    Construct a distribution from a list of words.

val next_in_htable : ('a, distribution) Hashtbl.t -> 'a -> string
    Find a continuation for a given word in a distribution.

val build_ptable : string list -> int -> ptable
    Take a list of words and a depth. Construct markov's chain.

val walk_ptable : ptable -> string list
    Produce a random words' list from a given markov's chain.

```