Encoder

- input_file: str
- output_file: str

+ Encoder(input, output): void
- encode(): void
- build_frequency(filename): Heap
- build_tree(heap: Heap): SaplingNode
- build_lexicon(SaplingNode): Mapping

TreeBuilder <<Static struct>>

+ saplings: Heap

+ build(): SaplingNode

Decoder

- input_file: str
- output_file: str
- lexicon: Mapping

+ Decoder(lexicon, input_file, output_file): void
+ Decoder(input_file, output:file): void
+ decode(): void
- get_lexicon(): Mapping
- write_lexicon(): void
- parse_encoding(): void
- write(): void

SaplingNode

- key: string
- value: int
- left_child: SaplingNode
- right_child: SaplingNode

+ SaplingNode(): void
+ get_key(): string
+ get_value(): int
+ get_left_child(): SaplingNode
+ get_right_child(): SaplingNode