1. Bill wanted/intended/hoped/said/seemed/forgot/asked/failed/tried/decided to write the book.
2. Bill enjoyed/tried/finished/admitted/reported/remembered/permitted writing the book.
3. Bill thought/said/forgot/remembered/reported/was sad/discovered/knew that he wrote the book.
4. Bill asked/wondered/knew/discovered/said why he wrote the book.

There are four different types of complement (noun clause, either subject or object - the ones above are all object complements): respectively, they are called infinitive, gerund, that-clause, and embedded question. These types, and their structures and markers (like to and -ing) are often called complementizers. Other names for these types include for-to complementizer (infinitive), POSS-ing (or ACC-ing) complementizer (gerund), inflected (or tensed) clause (that), or WHcomplementizer (embedded question). Which term you use is of no concern; they're equivalent.

Infinitives and gerunds are often called non-finite clauses, while questions and that-clauses are called finite clauses, because of the absence or presence of tense markers on the verb form.
That-clauses and questions must have a fully-inflected verb, in either the present or past tense, while infinitives and gerunds are not marked for tense. Non-finite complements often do not have overt subjects; these may be deleted either because they're indefinite or under identity.
Very roughly speaking, infinitives refer to states, gerunds to events or activities, and that-clauses to propositions, but it is the identify and nature of the matrix predicate governing the complement (i.e, the predicate that the complement is the subject or object of) that determines not only what kind of thing the complement refers to, but also whether there can be a complement at all, and which complementizer(s) it can take, if so. Many verbs can take several different kinds of complement, often with quite different senses.

Each of the types have subtypes with special uses, also governed by the matrix predicate.

- Infinitives may occur
with or without to,
with or without an overt subject, and
with or without the preposition for marking the subject.
In the case of an infinitive of a predicate adjective or noun, it may appear with or without to be (see Borkin).
- Gerunds may occur
without an overt subject,
with a subject in the possessive form (POSS-ing), or with a subject in the objective form (ACC-ing).
- That-clauses may occur
with an inflected verb, or
with the base (uninflected) form of the verb (the so-called 'subjunctive’ form).
- Embedded questions may occur
as ordinary WH -questions (with WH -attraction, but without inversion), or as infinitives (with WH -attraction) .
NB: It is important to bear in mind that all of this variation is conditioned by the matrix predicate. That is what determines the existence, type, and sense of its complement.

Assignment: Find or construct two examples of each subtype of complement, one subject complement and one object complement each. Note any restrictions you discover.

