Programming I (Python)
Assignment 1

1. of the following will typecheck:

    1. 1 +. 2
    2. 1 + 2
    3. 1. +. 2.
    4. 1.0 + 2.0
    5. 1.0 +. 2.0
    6. 1. +. 2

2. A working definition of a "safe" programming language is:

    1. A program written in the programming language can't ever fail.
    2. A valid program will never fault because of an invalid machine operation.
    3. There are no runtime type errors.
    4. Type conversions are disallowed.

3. The name of the OCaml debugger is:

    1. ogdb
    2. odebug
    3. ocamldebug
    4. ocamlgdb

4. Which of the below are true about OCaml type system?

    1. Statically typed
    2. Dynamically typed
    3. Implicitly typed
    4. Explicitly typed
    5. Both implicitly and explicitly typed

5. Which of the following operators have left associativity:

1. +
2. <>
3. !=
4. ˜−.
5. mod
6. lsr
7. lnot

6. Which are possible ways of executing an OCaml program:

    1. Write on the OCaml toplevel.
    2. Write in a file and run with ocaml command.
    3. Write in a file, compile with ocamlc command and run the executable.
    4. Write in a file, compile with ocamlopt command and run the executable.
    5. Write in a file, compile with ocamlcom command and run the executable.

7. Which of the following are valid variable names in OCaml:

    1. abc
    2. ab_c
    3. Abc
    4. Ab_c
    5. ab−c
    6. ab1

8. Which of the following statements is true about OCaml expressions:

    1. OCaml expressions can't have side-effects.
    2. OCaml expressions evaluate to a single value.
    3. Every expression has exactly one type.
    4. The type of the expression depends of the values evaluated so far.

9. Which of the following are native types in OCaml?

    1. int
    2. float
    3. char
    4. string
    5. list
    6. tuple
    7. dictionary
    8. record

9. class

10. modules

10. When we use one of the OCaml compilers to compile an OCaml program program.ml, the compiler name and object code file name are related as follows:

1. ocamlc $\mapsto$ program.mlo

2. ocamlopt $\mapsto$ program.mlo

3. ocamlc $\mapsto$ program.mlc

4. ocamlc $\mapsto$ program.cmo

5. ocamlc $\mapsto$ program.cmx

6. ocamlopt $\mapsto$ program.cmo

7. ocamlopt $\mapsto$ program.cmx