Theory of Computation

MIEIC, 2nd Year

João M. P. Cardoso
Email: jmpc@acm.org

João M. P. Cardoso
Email: jmpc@acm.org

U.PORTO

FEUP **FACULDADE DE ENGENHARIA**
UNIVERSIDADE DO PORTO

DEI DEPARTAMENTO DE
ENGENHARIA INFORMÁTICA

REs in UNIX/Linux

▶ ASCII: alphabet with 128 symbols

▶ Symbol '.' means "any char"

▶ [abcd] means a+b+c+d

▶ [A-Z] means all the uppercase letters

▶ "|" means "+"

▶ "?" means 0 or 1 of

▶ "*" means 0 or more

▶ "+" means 1 or more

▶ {n} means n copies of

▶ Search using REs in the utility **grep** (*global regular expression and print*)

Exercise 3 (homework)

▶ Write a regular expression (e.g., using the PCRE format, or the format used in UNIX/Linux grep) to
   ▶ Search for phone numbers in a text
   ▶ Search for codex codes (with number and locality) in a text

▶ PCRE (Perl Compatible Regular Expressions):
   ▶ https://www.pcre.org/
   ▶ https://pt.wikipedia.org/wiki/Perl_Compatible_Regular_Expressions