De La Salle University
College of Computer Studies

CSSECDV Activity – Regular Expressions

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Section: S11 | Grade:

1.0 Regular Expressions

Design regular expressions for each of the given scenarios below. There should only be a single regular expression per scenario that must satisfy all the indicated test cases. You do not need to write a program, just the actual regular expression will be accepted as answer. Place your answers on the spaces provided.

Note: You may use tools such as **https://regex101.com/** to help you write and test your regular expressions. For consistency, set the **Flavor to Java 8**, so that it would also be usable for your case study. You may also refer to the **Quick Reference pane** should you need examples.

1.1 Accept if a DLSU number starts with 120 and contains exactly eight (8) digits.
Assumption: The regular expression will not check if the ID number is legitimate, but will only validate the number syntactically.

Input	12012345	12000000	120	1205467	12143566
Result	Accept	Accept	Reject	Reject	Reject

```
^120\d{5}$
```

1.2 Accept a positive integer or a floating-point number of two (2) decimal places at most.

Input	50	125.00	74.15	-41	84.235
Result	Accept	Accept	Accept	Reject	Reject

```
^[1-9]\d*(\.\d{1,2})?$
```

1.3 Accept a valid hexadecimal number.
Assumption: The 0x_ format or Floating point values are not included. The regular expression is not case sensitive.

Input	1234567890	DECADE	6ace1	45AGE	ACE.80
Result	Accept	Accept	Accept	Reject	Reject

```
^(0x|0X)?[A-Fa-f0-9]+$
```

1.4 Accept a date in the format of “yyyy-mm-dd”.

Assumption: The regular expression will not check if the date is valid. Only syntactic validation is required

Input	2022-03-10	0000-00-00	1234-25-67	2022/03/10	2021-1-1	12-12-1212
Result	**Accept**	**Accept**	**Accept**	**Reject**	**Reject**	**Reject**

```
^\d{4}-\d{2}-\d{2}$
```

1.5 Accept a valid email address.

*Assumption: The email format would use **prefix@domain**.*

*- The **prefix** may only contain alphanumeric and special characters (underscores, periods, and dashes only) where the special characters must be followed by one or more letter or numbers.*

*- The **domain** may only contain alphanumeric characters and dashes where the last portion must be at least two (2) letters.*

Input	abc-d@mail.com	ab.cd@mail.com	abc-@mail.c	abc..def@mail#.com
Result	**Accept**	**Accept**	**Reject**	**Reject**

```
^[a-zA-Z0-9]+([._-][a-zA-Z0-9]+)*@[a-zA-Z0-9-]+\.[a-zA-Z]{2,}$
```

1.6 Accept a password using the recommended password strength controls

Assumption: Password length must be at least 12 characters and 64 characters at most. It must also contain at least 1 upper case character, at least 1 lower case character, at least 1 digit, and at least 1 special character

Input	@n1M0La5A!l3	D+7"/4bH,Nw_4:h^	DLSU1234!	accessingwifi
Result	**Accept**	**Accept**	**Reject**	**Reject**

```
|)(?=.*\d)(?=.*[!@#$%^&*()_\-+=\[\]{};:'\",<.>/?\\|~])[A-Za-z\d!@#$%^&*()_\-+={};:
```