

1. Build a program using C++ which will take a regular expression that has at most 3 elements and made with 'U', '*', '+'. The program will take one string as input from the user, and it will check if the user given strings are valid or invalid for the regular expression.

Sample:

User given regular expression: **aUb**

User Given String: **b** **status: valid**

User Given String: **ab** **status: invalid**

User given regular expression: **a***

User Given String: **aaaa** **status: valid**

User Given String: **ab** **status: invalid**

User given regular expression: **a+**

User Given String: **aaaa** **status: valid**

User Given String: **“ “** **status: invalid**

User given regular expression: **a+* or aU* or a*U**

Status: Invalid Expression