Programming Assignment Week 12 (Regular Expressions):

1. (30pts) Write a Python program that matches a string that has an a followed by zero or more b's. Sample Input:

Sample Output:

```
ac has a match!
abc has a match!
abbc has a match!
eieio ax zzbb cc a bba has a match!
aaaabab aaa has a match!
xxxx abzzzzz has a match!
uuuuuu not matched!
```

2. (30pts) Write a Python program to find the sequences of one upper case letter followed by lower case letters.

Sample Output:

```
AaBbGg has a match!

Python has a match!

python not matched!

PYTHON not matched!

aA not matched!

Aa has a match!
```

3. (30pts) Write a Python program that matches a word containing 'z'.

Sample Output:

```
The quick brown fox jumps over the lazy dog. has a match!

Python Exercises. not matched!

I like pizza. has a match!

UC Berkeley courses use Piazza has a match
```

4. (30pts) Write a Python program to check for a number at the end of a string.

Sample Output:

```
abcde not matched!
forever21 has a match!
george bush not matched!
level 5 has a match!
```

```
twins2 has a match!
lululemon123t good not matched!
```

5. (30pts) Write a Python program to replace whitespaces with an underscore and vice versa.

Sample Output:

```
Original String: Wall Street

space by _ : Wall_Street

_ by space : Wall Street

Original String: Computer Science

space by _ : Computer_Science

_ by space : Computer Science

Original String: long long ago

space by _ : long_long_ago

_ by space : long long ago

Original String: real-estate

space by _ : real-estate

_ by space : real-estate
```