

**Instructions: Each response should be in a .py file. Submit all your code to**

**<https://submittity.cs.rpi.edu>**

**Answer the following questions:**

1. Write a program that returns the maximum of two numbers. ( 20 points)
2. Write a program that takes a user input and does the following: (30 points)
  - a. If the number is divisible by 3 and 5, program outputs 'YES'
  - b. If the number is divisible by 3 or 5, program outputs 'NO'
  - c. If the number is not divisible by either 3 or 5 program outputs 'UNKNOWN'
3. Create a program that adds 'ing' at the end of a given string (length should be at least 3).  
If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged. (30 points)  
Sample String : 'abc'  
Expected Result : 'abcing'  
Sample String : 'string'  
Expected Result : 'stringly'
4. Write a program in Python that takes input as a string. Replace all occurrences of its first character by '&' sign (except the first character itself). For example if the input is 'rechargerr' then the output must be 'recha&ge&&'. (20 points)