

Assignment 6

(Loop control structure.)

1. Input the values for x and y. Compute x^y without using library function.
2. Input a number and check whether it is palindrome or not.
3. Input a number and check whether it is a prime number or not.
4. There are 9,870 people in a town whose population increases by 10% each year. Write a loop that displays the annual population and determines how many years (count_years) it will take for the population to surpass 30,000.
5. Write a for loop to print all factors of a given number.
6. Write for loops to print the following series:
 - a) 1, 2, 4, 8, 16, 32
 - b) 1, 3, 9, 27, 81, 243
 - c) -4, -2, 0, 2, 4
 - d) -10, -12, -14, -18, -26, -42