//PROBLEM3\_FUNCTIONS.cpp

//Andrew Ribeiro

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//Used in: PROBLEM3.cpp

/\*File Discription & Contents.

>This file contains the functions for the main source file: PROBLEM3.cpp

####### Functions located in this file #########

1.)int reverseNumber(int num)

This function reveses the integer number-num. This function returns num reversed.

Ex: reverseNumber(45) == 54 is true.

2.)bool isPrime(int num)

This function tests if the integer number-num- is prime. The function then returns

false(0) if the number is not prime or if the number is prime, the function

returns true(1).

\*/

#include <iostream>

using namespace std;

//Reverses the number

int reverseNumber(int num)

{

int reversedNum = 0;

if(num >= 10)

{

while(num > 0)

{

reversedNum = reversedNum \* 10 + (num % 10) ;

num /= 10;

}

return reversedNum;

}

else

{

return num;

}

}

bool isPrime(int num)

{

/\*Tests num to determine if it is prime or not. If num is prime, then the function returns true.

if the number is not prime, then the function returns false.\*/

//Zero is not prime; therefore, make shure isPrime returns false if num == 0.

if(num != 0)

{

for(int i = 2; i < num; i++)

{

if(num % i == 0)

{

return false; //Num was divisible by a number other than itself and one.

}

}

return true; //If the number was not divisible other than itself and one, it is true that it is prime.

}

else

{

return false;

}

}