Lab - Functions

- Before you work on the following problems, do the problems in “Function prototypes” first and make sure you understand it thoroughly.

1. Write a function called printHello() that outputs “Hello” on the screen.
2. Write a function called rowStars() that:
   a. Takes an integer value of n from the parameter.
   b. Prints a row of “*” n times on the screen.
3. Write a function called circleArea that:
   a. Takes a double value from parameter.
   b. Calculates the area of the circle.
   c. Returns the area of the circle.
4. Write a function called pow() that takes two parameters, a base and a power. The function returns the value of base\(^\text{power}\) to the user. (For simplicity, only implement the function for positive values of power and base, and both are integers.)
5. Write a function called displayReverse() that takes an integer and displays the reverse of that number on the screen.
6. Write a function called numberToTens() that takes an integer and returns the corresponding number in one and zeros. For example: if the number is 54321, returns 10000.

*******The following questions are not easy!******

7. Write a function called reverse() that takes an integer and returns the reverse of that number. For example: If the input for the function is 1234, it should return 4321 as an integer, not string. (Hint: You might need the function in #6.)

   ```
   int reverse(int number);
   ```

8. Write a function called isPalindrome() that tests if the number is a palindrome, then returns true, else returns false. (Hint: Use the reverse() function. If a number and its reverse are the same, then it is a palindrome).

   ```
   bool isPalindrome(int number);
   ```