Practical 7

Question 1

Print:

123 Hello World
123456 Hello World
123456789 Hello World
12345678910112 Hello World
123456789101112131415 Hello World

* Use one outer loop to print 5 lines and an inner loop to print the numbers

Question 2

Reverse the loop above, to print:

123456789101112131415 Hello World
12345678910112 Hello World
123456789 Hello World
123456 Hello World
123 Hello World

* Use one outer loop to print 5 lines and an inner loop to print the numbers

Question 3

Print all uppercase alphabets using while loop

Question 4

Write a program with a DO WHILE loop that asks passengers on a commuter airline if they want a window seat and keeps track of their responses. The flight has 8 passengers and 4 window seats. Discontinue the loop when all the window seats are taken. After the loop ends, display the number of window seats taken and the number of passengers questioned.

Question 5

Question 6

An online retailer sells five different products whose retail prices are shown in the following table:

Product number	Retail price
1	$ 2.98
2	$ 4.50
3	$ 9.98
4	$ 4.49
5	$ 6.87

Write a program that reads a series of pairs of numbers as follows:
a) Product number
b) Quantity sold for one day

Your program should use a switch statement to help determine the retail price for each product.
Your program should calculate and display the total retail value of all products sold last week.

Question 7

A person invests $1000.00 in a savings account yielding 5% interest. Assuming that all interest is left on deposit in the account, calculate and print the amount of money in the account at the end of each year for 10 years. Use the following formula for determining these amounts:

$a = p(1 + r)^n$

where

- p is the original amount invested (i.e., the principal)
- r is the annual interest rate
- n is the number of years
- a is the amount on deposit at the end of the nth year.
- This problem involves a loop that performs the indicated calculation for each of the 10 years the money remains on deposit.