- 1. Make a program that, depending on the integer input (1 to 12), prints out the corresponding month.
- 2. Make a calculator that takes input of two integers, a character to pick the operation (+, -, \*, /), and prints the result.
- 3. Make a program that prints out all the numbers from 1 to n.
- 4. Make a program that prints out all the numbers from 1 to n, which are divisible by 3.
- 5. Make a program that adds up all the numbers from 1 to n.
- 6. Make a program that calculates the factorial of n.
- 7. Make a program that prints out all the three-digit numbers that are divisible by the number you get when you take out the second digit ((ABC)%(AC) == 0)
- 8. Make a program that finds the greatest common divisor (GCD) and lowest common denominator (LCD) of two numbers (a and b). GCD can be found found by the Euclid's algorithm, while the Lowest common denominator is found by the formula:

$$LCD = \frac{a \cdot b}{GCD(a, b)}$$

- 9. Make a program that prompts the user for an integer (n) and then prints out all the numbers from 1 to n that are divisible by 17.
- 10. Make a program that prompts the user for a decimal integer and turns it into a binary number.
- 11. Make a program that prints out a menu with the following choices:
  - Draw a right triangle
  - Draw an isosceles triangle (triangle which has two same sides)
  - Draw a rectangle

and then goes through with the chosen option. If user incorrectly inputs the choice, print out an error

and their goes through with the chosen option. If user incorrectly inputs the choice, print out an error								
Option 1 draws the triangle in	Option 2 draws the triangle in	Option 3 draws the rectangle in						
the form of:	the form of:	the form of:						
*	*	****						
**	***	****						
***	****	*****						
***	*****	*****						
****	*****	*****						
****	*****	*****						
First prompt the user for num-	First prompt the user for num-	First prompt the user for num-						
ber of rows and then draw the	ber of rows and then draw the	ber of both rows and columns						
triangle	triangle	and then draw the rectangle						

12. Make a program that writes the first n numbers of the Fibonacci sequence. Fibonacci sequence is defined by:  $F_n = F_{n-1} + F_{n-2}$ , the seed numbers are  $F_0 = 0$  and  $F_1 = 1$ 

13. Make a program that prompts the user for a number and depending on the number draws the following:

1				
121	1			
12321	121	1		
1234321	12321	121	1	
123454321	1234321	12321	121	1
1234321	12321	121	1	
12321	121	1		
121	1			
1				
Example for 5	For 4	For 3	For 2	For 1

14. Using a for loop make a program that will print out the multiplication table in the following format:

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

15. Using a for loop make a calendar for a specific month. Prompt the user for how many days are in the month and on which day it begins (which day of the week is the first in the month). Print the table in the following format:

Mon	Tue	Wed	Thu	$\operatorname{Fri}$	Sat	$\operatorname{Sun}$
				1	2	3
4	5	6	•	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	