## Lab work - for loops

Please use for loops to solve the following problems

1. Write a complete C++ program that does the following:

- It asks the user to enter their age
- If a negative integer is entered, ask the user repeatedly until a positive integer is entered.
- The program should print the word Hello once for each year of the user's age.
- Here is an example of how the program should work:
- Enter your age: 5
- Hello Hello Hello Hello Hello

2. Write a complete C++ program that

- asks the user to a positive integer between 1 and 10
- checks that the value entered is valid, if not ask the user repeatedly until an integer between 1 and 10 is entered.
- calculates and prints out $x^{\times}$(DO NOT USE pow() ) as shown below

Here is an example of the program should work:
Enter a number between 1 and 10: 6

| $6^{\wedge} 1$ | $=$ | 6 |
| :--- | :--- | :--- |
| $6^{\wedge} 2$ | $=$ | 36 |
| $6^{\wedge} 3$ | $=$ | 216 |
| $6^{\wedge} 4$ | $=$ | 1296 |
| $6^{\wedge} 5$ | $=$ | 7776 |
| $6^{\wedge} 6$ | $=$ | 46656 |

3. Print out all odd numbers from 1 to 500. (8 numbers per line)
