Q1.

In the first to sixth option number, their computation times are the same, then, after 3 options, each number will increase 200 ns, then after options, each one is the 1.5-1.7 times of before. For the larger K between two options, they are very different. That has the difference 1.5 - 1.7 times between two options.

Q2.

When I do change the entry type with u8, it can not be run the program because it get the debug, it said

error:

process didn't exit successfully:

`C:\Users\Administrator\HW6\part2\target\debug\part2.exe` (exit code: 101)

Q3.

Integer overflow is not a concern in this specific code for computing the sum of squares up to k with u32 because:

The u32 range is sufficiently large for the sum of squares of numbers that can be input as u32.

The iterative calculation method ensures that each addition's result is checked within the u32 limit.

Practical input values of k will not lead to a sum that exceeds the maximum u32 value, making the program safe from integer overflow within its operational constraints.