Meltdown and Spectre in modern computers leak passwords and sensitive data.

Meltdown and Spectre exploit critical vulnerabilities in modern processors . These hardware vulnerabilities allow programs to steal data which is currently processed on the computer.

Spectre and Meltdown could allow potential attackers to get access to data they shouldn't have access to using the techniques outlined above, but their effects are somewhat different:

Exploiting Meltdown, an attacker can use a program running on a machine to gain access to data from all over that machine that the program shouldn't normally be able to see, including data belonging to other programs and data that only administrators should have access to. Meltdown doesn't require too much knowledge of how the program the attacker hijacks works, but it only works with specific kinds of Intel chips.

Spectre's but also derives from the fact that it will be much trickier to stop — while patches are starting to become available, other attacks in the same family will no doubt be discovered. That's the other reason for the name.