

1) Hardware breakpoints are limited in functionality and highly architecture dependent, but are faster due to the fact that they have dedicated registers and are much more dependable. Software breakpoints are unlimited but can only be used in RAM.

2) Watchpoints are able to track variables throughout the code and see their current values. A breakpoint though can only be set for a certain line of code and check whether the code executes properly or not.

3) Yes, it is possible. The command is (gdb) set int foo=1;

4) (gdb) ptype my_string
type = char[STRING_LENGTH]

5) br bugs.c:2;
Cond 1 i==9999;

6) br bugs.c:7;
Set \$p1 = priority;
Cond 1 strcmp(task,priority)==0;