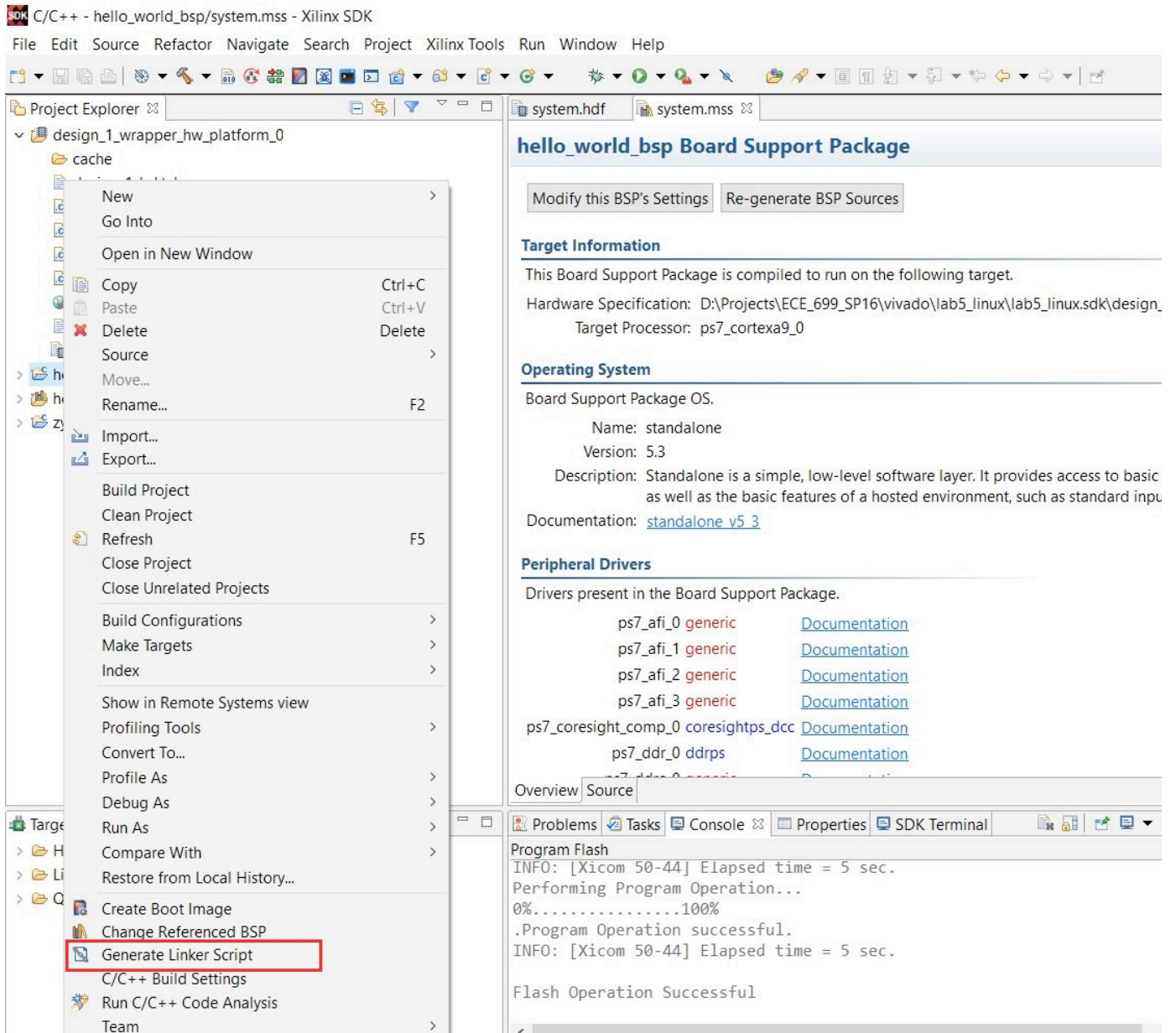# Memory Allocation in Xilinx SDK Environment

1- Create a new application project in Xilinx SDK
2- Right click on the project name and choose *Generate Linker Script*

3- In Generate Linker Script window, you can choose between DDR memory and On-Chip memory to store Code sections, Data sections, Heap and Stack. Also, you can specify Heap size and Stack size. In case of DDR memory you should choose *ps7_ddr_0_S_AXI_BASEADDR* and for On-chip memory you can choose either *ps7_ram_0_S_AXI_BASEADDR* or *ps7_ram_1_S_AXI_BASEADDR*.

4- Finally, click on *Generate* button and the new linker script will be generated.

Variable Type	Location in Memory
Global variables	Data
Static variables	Data
Constant data types	Code or Data
Local variables	Stack
Dynamically allocated space (using malloc, calloc, realloc)	Heap
Pointers	Data or Stack