

Memory Layout / Map

- **Text Segment**

- program code

- **Data Segment**

- **Static**

- global variables
- e.g., static variables in C, constant arrays and strings
- \$gp initialized to address allowing \pm offsets into this segment

- **Dynamic**

- **Heap**

- e.g., *malloc* in C, *new* in Java

- **Stack**

- automatic storage

\$sp → 7fff fffc_{hex}

\$gp → 1000 8000_{hex}
1000 0000_{hex}

pc → 0040 0000_{hex}
0

