# Higher virtual addresses

## **STACK**

(stack frames consisting of parameters, return addresses and local variables)

Parameters of f()
Return address & old rbp
Local variables of f()

free

#### HEAP

(dynamic variables, malloc)

## **BSS**

(uninitialized global and static variables)

### **DATA**

(initialized global and static variables)

#### **TEXT**

(program code)

Bottom of stack

Stack grows by decrementing it

→ rbp

rsp
(top of stack)

Parameters get set by calling function (in c)

Lower virtual addresses