1\*3\*77[true]: cp:int=0, cbalance:int=D, gp:int=1, gbalance:int=(D + -R) C(garbage\_bin):ID:human\_address.OK::int((2 \* R)) 1\*4\*79[false]: cp:int=0, cbalance:int=D, gp:int=1, gbalance:int=(D + -R), cur\_q:int=q':int, ID:human\_address=id':human\_address C(garbage\_bin):ID:human\_address.OK::int(R) 1\*5\*40[true]: cp:int=0, cbalance:int=D, gp:int=2, gbalance:int=(D + -(2 \* R)) 1\*6\*42[true]: cp:int=0, cbalance:int=D, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e':int, ID:human\_address=gt\_id:human\_address C(garbage\_bin).bid::int\*human\_address[](e':int,gt\_id':human\_address)  $(of:int \ge (2 * R:int))$ 1\*7\*45[true]: cp:int=0, cbalance:int=D, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id':human\_address C(garbage\_bin):ID':human\_address.LOST::int(of':int) C(garbage\_bin):ID:human\_address.LOST::int(of:int) 1\*8\*47[true]: cp:int=0, cbalance:int=D, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id':human\_address C(garbage\_bin):ID:human\_address.WIN::() C(garbage\_bin):ID':human\_address.WIN::() (of:int >= of:int)1\*9\*49[true]: cp:int=0, cbalance:int=D, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address H(basiccitizen):C(incinerator).fee::int(D:int) 1\*10\*51[false]: cp:int=0, cbalance:int=D, gp:int=0, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id':human\_address C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) 1\*11\*53[true]: cp:int=0, cbalance:int=D, gp:int=0, gbalance:int=(D + (-(2 \* R) + (max of:int of':int))), of:int=e:int, ID:human\_address=gt\_id:human\_address, of':int=e':int, ID':human\_address=gt\_id':human\_address H(basiccitizen):C(incinerator).fee::int(D:int) H(basiccitizen):C(banca).save::int(balance:int) H(basiccitizen):C(incinerator).fee::int(D:int) 2\*11\*16[true]: cp:int=2, cbalance:int=0, gp:int=0, gbalance:int=(D + (-(2 \* R) + (max of:int of:int))), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_addre H(basiccitizen):C(banca).save::int(balance:int) H(basiccitizen):C(incinerator).fee::int(D:int)  $C(\text{garbage\_bin}): \text{incinerator:contract\_address.save::int}((D:\text{int} + (-(2 * R) + (\text{max of:int of':int}))))$ 2\*1\*2[true]: cp:int=2, cbalance:int=0, gp:int=0, gbalance:int=D H(basiccitizen):C(banca).save::int(balance:int) H(basiccitizen):C(incinerator).fee::int(D:int) C(garbage\_bin).dep::int\*human\_address[](q:int,id:human\_address)

C(garbage\_bin):ID:human\_address.NOK::()
(cur\_q:int > 2) 3\*2\*96[false]: cp:int=1, cbalance:int=0, gp:int=0, gbalance:int=D, cur\_q:int=1, ID:human\_address=H(basiccitizen) 2\*2\*3[false]: cp:int=2, cbalance:int=0, gp:int=0, gbalance:int=D, cur\_q:int=q:int, ID:human\_address=id:human\_address H(basiccitizen):C(incinerator).fee::int(D:int) H(basiccitizen):C(banca).save::int(balance:int) C(garbage\_bin):ID:human\_address.OK::int(R) H(basiccitizen):C(banca).save::int(balance:int)  $(cur_q:int = 1)$ 4\*3\*34[true]: cp:int=1, cbalance:int=R, gp:int=1, gbalance:int=(D + -R) 2\*3\*5[true]: cp:int=2, cbalance:int=0, gp:int=1, gbalance:int=(D + -R) H(basiccitizen):C(banca).save::int(balance:int) H(basiccitizen):C(incinerator).fee::int(D:int) C(garbage\_bin):ID:human\_address.NOK::() C(garbage\_bin).dep::int\*human\_address[](q':int,id':human\_address) C(garbage\_bin).dep::int\*human\_address[](q':int,id':human\_address) C(garbage\_bin):ID:human\_address.NOK::() C(garbage\_bin):ID:human\_address.OK::int((2 \* R)) 3\*4\*21[false]: cp:int=1, cbalance:int=0, gp:int=1, gbalance:int=(D + -R), cur\_q:int=1, ID:human\_address=H(basiccitizen) 5\*4\*38[false]: cp:int=0, cbalance:int=R, gp:int=1, gbalance:int=(D + -R), cur\_q:int=1, ID:human\_address=H(basiccitizen) 4\*4\*35[false]: cp:int=1, cbalance:int=R, gp:int=1, gbalance:int=(D + -R), cur\_q:int=q':int, ID:human\_address=id':human\_address 2\*4\*6[false]: cp:int=2, cbalance:int=0, gp:int=1, gbalance:int=(D + -R), cur\_q:int=q':int, ID:human\_address=id':human\_address C(garbage\_bin):ID:human\_address.OK::int(R) C(garbage\_bin):ID:human\_address.OK::int(R) H(basiccitizen):C(banca).save::int(balance:int) 6\*5\*39[true]: cp:int=0, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)) 4\*5\*22[true]: cp:int=1, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)) 2\*5\*8[true]: cp:int=2, cbalance:int=0, gp:int=2, gbalance:int=(D + -(2 \* R)) C(garbage\_bin).bid::int\*human\_address[](e:int,gt\_id:human\_address) C(garbage\_bin):ID:human\_address.lost::int(of:int) C(garbage\_bin):ID:human\_address.lost::int(of:int) C(garbage\_bin).bid::int\*human\_address[](e:int,gt\_id:human\_address) C(garbage\_bin):ID:human\_address.lost::int(of:int) C(garbage\_bin).bid::int\*human\_address[](e:int,gt\_id:human\_address) 6\*6\*59[true]: cp:int=0, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e':int, ID:human\_address=gt\_id:human\_address 4\*6\*23[true]: cp:int=1, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e':int, ID:human\_address=gt\_id:human\_address 2\*6\*9[true]: cp:int=2, cbalance:int=0, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e':int, ID:human\_address=gt\_id:human\_address  $C(\text{garbage\_bin}): \text{incinerator:contract\_address.save::int}((D:\text{int} + (-(2 * R) + (\text{max of:int of:int}))))$ C(garbage\_bin).bid::int\*human\_address[](e':int,gt\_id':human\_address) C(garbage\_bin).bid::int\*human\_address[](e':int,gt\_id':human\_address) C(garbage\_bin).bid::int\*human\_address[](e':int,gt\_id':human\_address) 6\*7\*62[true]: cp:int=0, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address 2\*7\*11[true]: cp:int=2, cbalance:int=0, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address 4\*7\*25[true]: cp:int=1, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address H(basiccitizen):C(incinerator).fee::int(D:int) C(garbage\_bin):ID':human\_address.LOST::int(of':int) C(garbage\_bin):ID:human\_address.LOST::int(of:int) C(garbage\_bin):ID:human\_address.LOST::int(of:int) C(garbage\_bin):ID':human\_address.LOST::int(of:int) C(garbage\_bin):ID':human\_address.LOST::int(of':int) C(garbage\_bin):ID:human\_address.LOST::int(of:int) C(garbage\_bin):ID:human\_address.OK::int(R) 6\*8\*64[true]: cp:int=0, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id':human\_address 2\*8\*12[true]: cp:int=2, cbalance:int=0, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id':human\_address 4\*8\*26[true]: cp:int=1, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address  $(cur_q:int = 1)$ C(garbage\_bin):ID:human\_address.WIN::() C(garbage\_bin):ID':human\_address.WIN::() C(garbage\_bin):ID':human\_address.WIN::() C(garbage\_bin):ID:human\_address.WIN::()  $(of:int \ge of:int)$ 2\*9\*13[true]: cp:int=2, cbalance:int=0, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address /C(garbage\_bin):ID:human\_address.OK::int((2 \* R))  $C(\text{garbage\_bin}):\text{ID:human\_address.OK::int}((2 * R))$ 4\*9\*27[true]: cp:int=1, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address 6\*9\*66[true]: cp:int=0, cbalance:int=R, gp:int=2, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of':int=e':int, ID':human\_address=gt\_id:human\_address  $(cur_q:int = 2)$  $\Big( (((of:int >= of:int) \land \sim (id:human\_address = ID:human\_address)) \lor ((of:int > of:int) \land \sim (id:human\_address = ID':human\_address))) \Big)^{C(garbage\_bin).empty::string[](id:string))$  $(((of:int >= of:int) \land \sim (id:human\_address = ID:human\_address)))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address)))) \lor ((of:int > of:int) \land \sim (id:human\_address)))) \lor ((of:int > of:int) \land \sim (id:human\_address)))) \lor ((of:int > of:int) \land \sim (id:human\_address))))$  $(((of:int >= of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address = ID:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address))) \lor ((of:int > of:int) \land \sim (id:human\_address)))$ C(garbage\_bin):ID:human\_address.OK::int(R) 6\*10\*68[false]: cp:int=0, cbalance:int=R, gp:int=0, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address 4\*10\*28[false]: cp:int=1, cbalance:int=R, gp:int=0, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of':int=e':int, ID':human\_address=gt\_id':human\_address 2\*10\*14[false]: cp:int=2, cbalance:int=0, gp:int=0, gbalance:int=(D + -(2 \* R)), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_address  $(cur_q:int = 1)$ C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) C(garbage\_bin):incinerator:contract\_address.notify::string\*int(ID:string,id:int) 6\*11\*70[true]: cp:int=0, cbalance:int=R, gp:int=0, gbalance:int=(D + (-(2 \* R) + (max of:int of':int))), of:int=e:int, ID:human\_address=gt\_id:human\_address, of':int=e':int, ID':human\_address=gt\_id':human\_address 4\*11\*30[true]: cp:int=1, cbalance:int=R, gp:int=0, gbalance:int=(D + (-(2 \* R) + (max of:int of:int))), of:int=e:int, ID:human\_address=gt\_id:human\_address, of:int=e':int, ID':human\_address=gt\_id:human\_addre C(garbage\_bin):incinerator:contract\_address.save::int((D:int + (-(2 \* R) + (max of:int of':int)))) C(garbage\_bin):incinerator:contract\_address.save::int((D:int + (-(2 \* R) + (max of:int of':int)))) 6\*1\*72[true]: cp:int=0, cbalance:int=R, gp:int=0, gbalance:int=D 4\*1\*31[true]: cp:int=1, cbalance:int=R, gp:int=0, gbalance:int=D C(garbage\_bin):ID:human\_address.NOK::() C(garbage\_bin).dep::int\*human\_address[](q:int,id:human\_address) H(basiccitizen):C(banca).save:int(balance:int) 5\*2\*90[false]: cp:int=0, cbalance:int=R, gp:int=0, gbalance:int=D, cur\_q:int=1, ID:human\_address=H(basiccitizen) 6\*2\*74[false]: cp:int=0, cbalance:int=R, gp:int=0, gbalance:int=D, cur\_q:int=q:int, ID:human\_address=id:human\_address 4\*2\*32[false]: cp:int=1, cbalance:int=R, gp:int=0, gbalance:int=D, cur\_q:int=q:int, ID:human\_address=id:human\_address 1\*1\*1[true]: cp:int=0, cbalance:int=D, gp:int=0, gbalance:int=D C(garbage\_bin):ID:human\_address.OK::int(R)

6\*3\*76[true]: cp:int=0, cbalance:int=R, gp:int=1, gbalance:int=(D + -R)

6\*4\*82[false]: cp:int=0, cbalance:int=R, gp:int=1, gbalance:int=(D + -R), cur\_q:int=q':int, ID:human\_address=id':human\_address

1\*2\*98[false]: cp:int=0, cbalance:int=D, gp:int=0, gbalance:int=D, cur\_q:int=q:int, ID:human\_address=id:human\_address

C(garbage\_bin):ID:human\_address.OK::int(R)