(U) in A4 - size = 100 type = [random] Buttle -> 0.048 + 0.05 + 0.078 + 0.048 + 0.071 >0.04 Merge => 0.032 + 0.034 + 0.047 + 0.034 + 0.053 > 0.04ms Quick = 0.012 + 0.011 + 0.016 + 0.011+0.015=0.013ms (2) input - size = 100 type = [revorse] Buble > 0.062 + 0:058 + 0.062 + 0:077 + 0:086 - 0.069 ms muge = 0.027+0.025+0.035+0.029+0.031 = 0.029ms BUICH => 0.009+0.025+0.008+0.009+0.009=> 0.012 ms 1 mout- size = 100 type=[Partial] Buble = 0:009+0:017+0:01+0:011+0:011 => 0:011 ms merge => 0.025+0.029+0.025+0.027+0.026=> 0.026ms Quick > 0.008+0.009+0.009+0.009+0.008=> 0.0086ms imput-5/20 = 500 type=[vandom] Babbe = 1.06+ 1.20 + 1.213, 1.135 + 1.084=> 1.13ms merge => 0.175 + 0.173 + 0.181 + 0.184 a. 179 > 0.177 mc QUICK > 0.063+ 0.071+0.071+0.0 81 +0.068

(5) imput - size = 500 type- [veverset Bubble = 1.613+ 1.643+1.994+1.641, 1.649 = 1.708ms Merge => 0.138+0.135 + 0.21+0.136+0.145 = 0.153 ms Quick = 01054+01656 + 01068+01062+01054 = 01057mg 6) impul- size= 1000 type =>[Partial] Bubble => 01973 + 1.647+ 1.115+1.026+01955=> 1.143 ms Marge =7 0+345+0,463+0.312+0:297+0.33 => 0.349 ms Quick=701125 40,196+0,109+0,11340,136 => 0,136 ms (7) imput- size = 1000 type=[vandom] Bubble=> 5,55746,533+6.107+4.929+5.181=>5.661 ms Menge=> 0.367+0515+039+0.54+0.392=>0.4411 ms Quick=>0,151 +0.203+0.154 +0.207+0.144=>0.172ms input-size= 5000 type = I reverse? Bulble => 324.487+164.904+197.475+585.791+378.778=>330.287m Merge = 21.679+ 1.563 + 2.493+ 1.806+2.476=> 2.003 ms Quick => 35.68+0.697+0.987+1.089 +1.108 => 73912 ms

