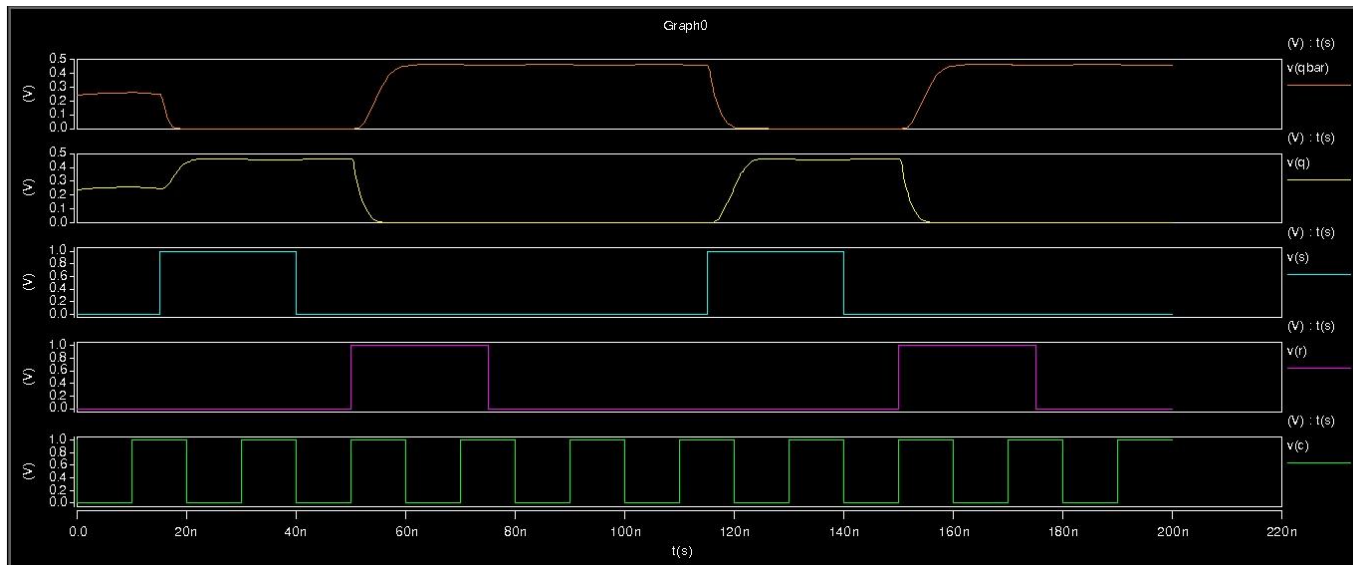
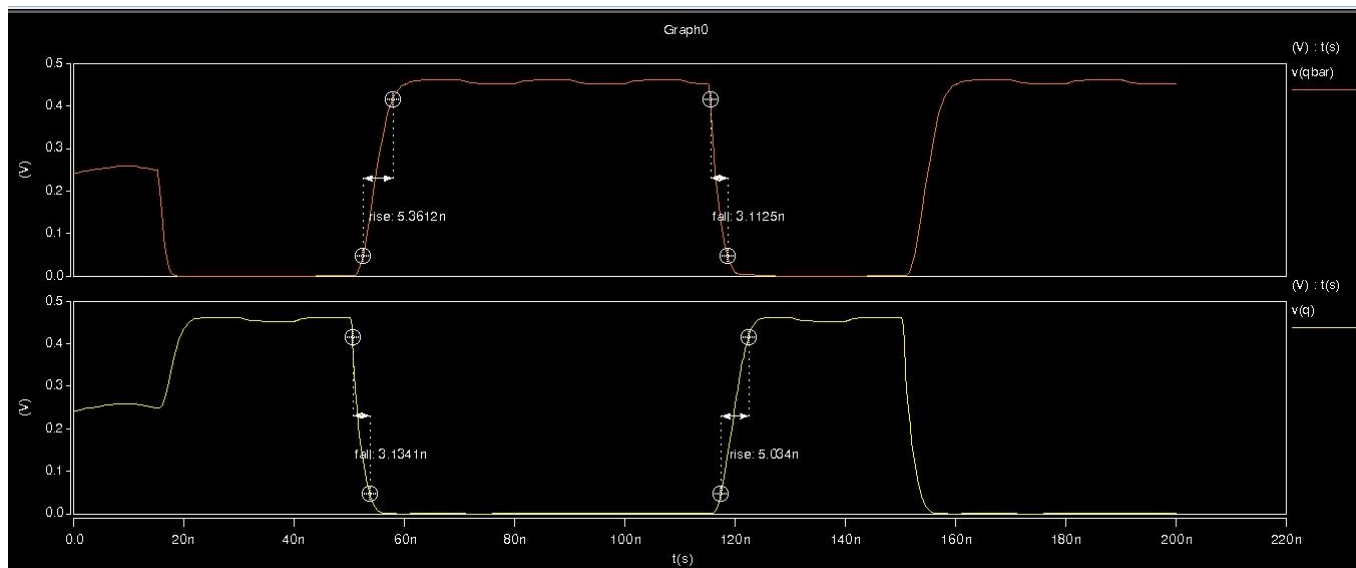


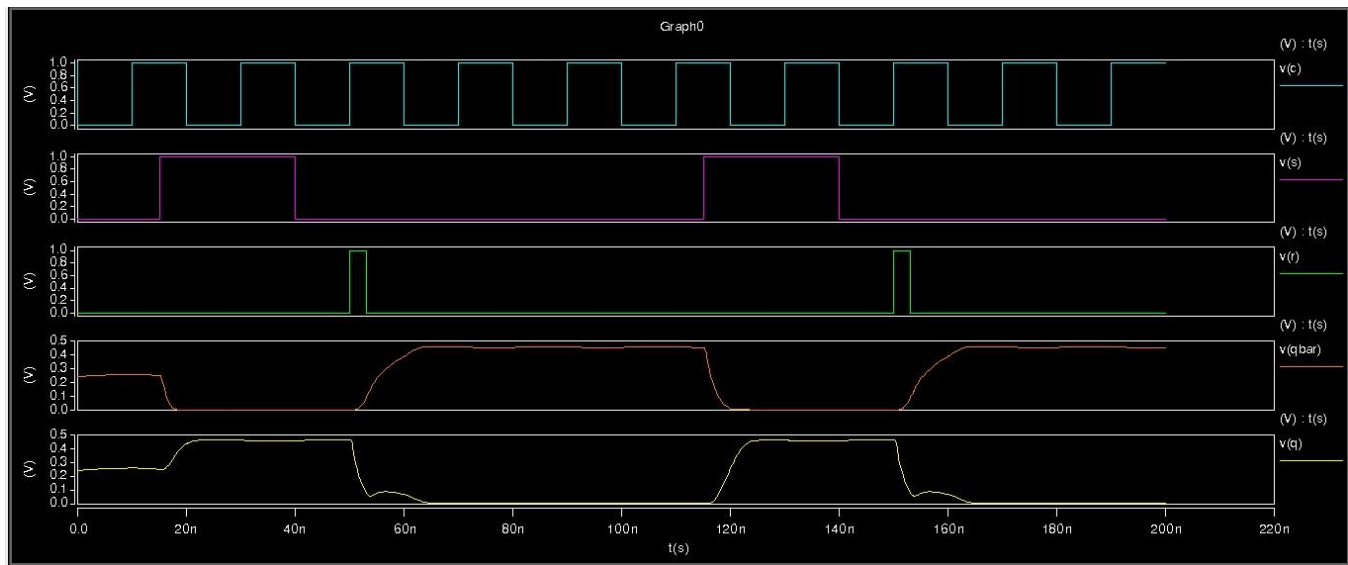
## سوال اول:



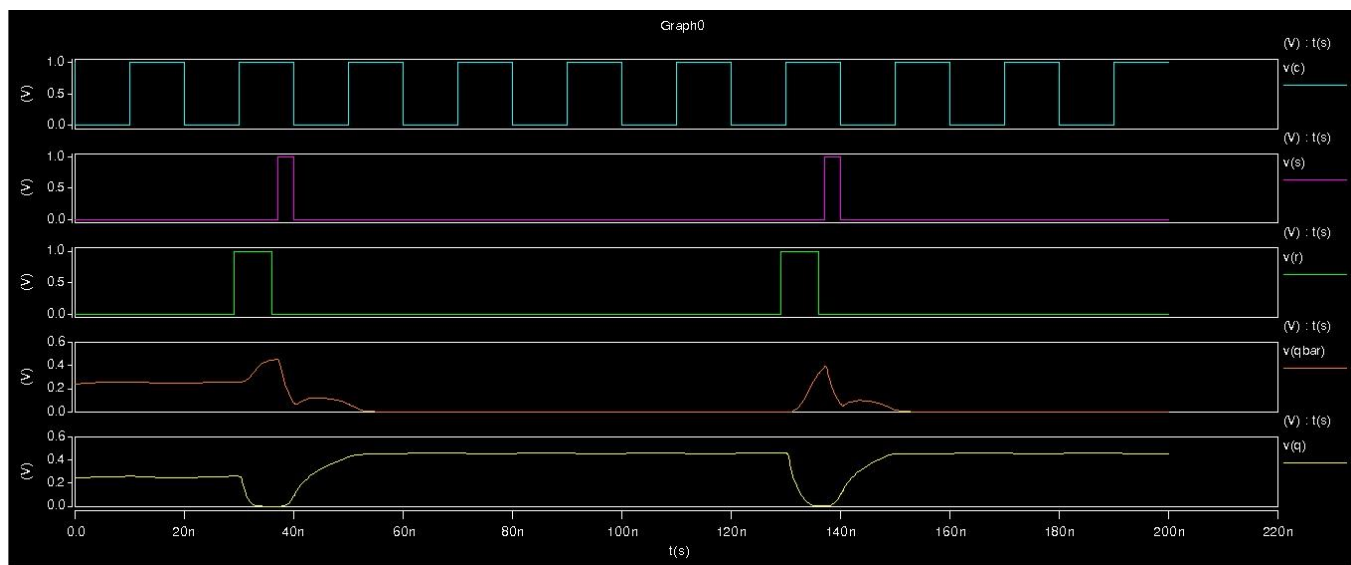
شکل 1: Inputs/ Outputs



شکل 2: Fall and Rise Time



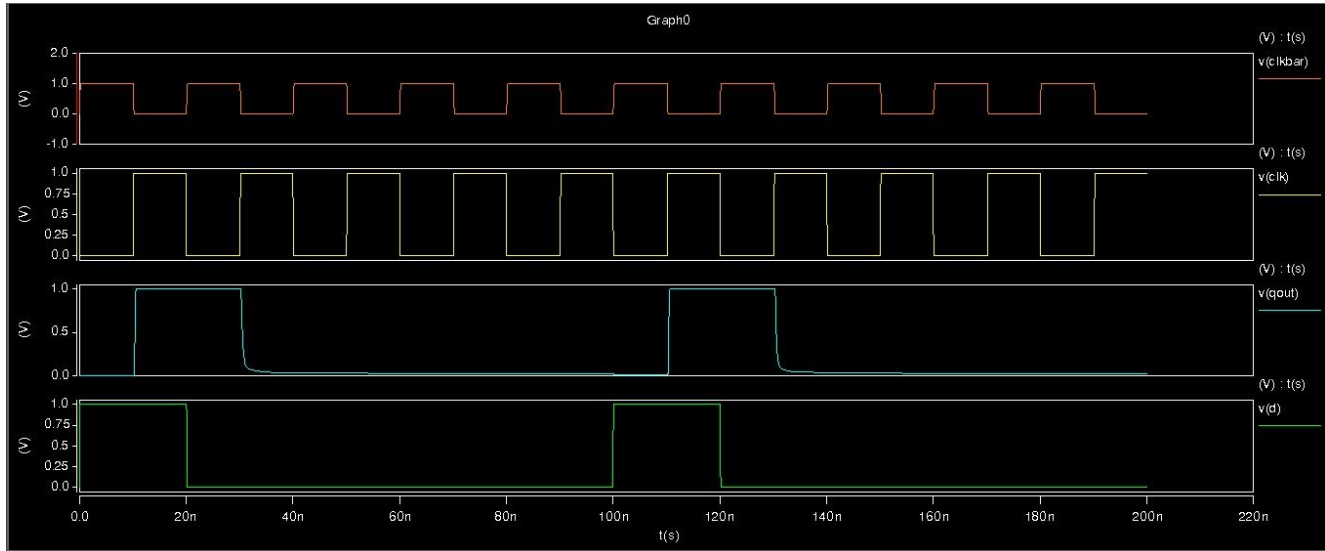
شکل 3: Glitch Effect in Output



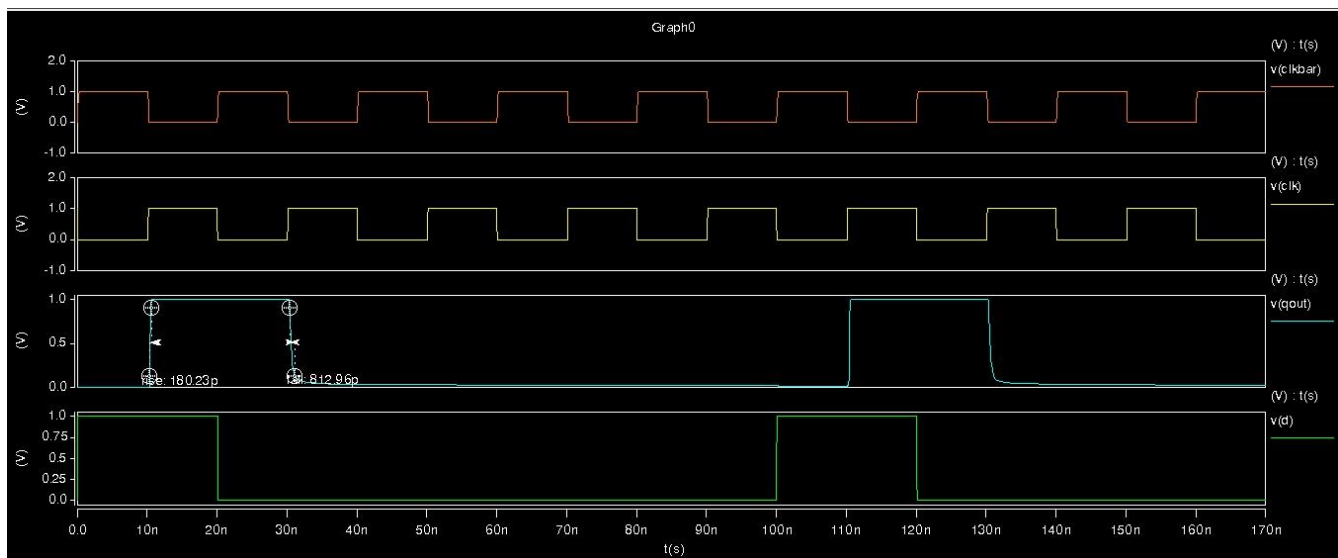
شکل 4: Setup Time و Hold Time

سوال دوم:

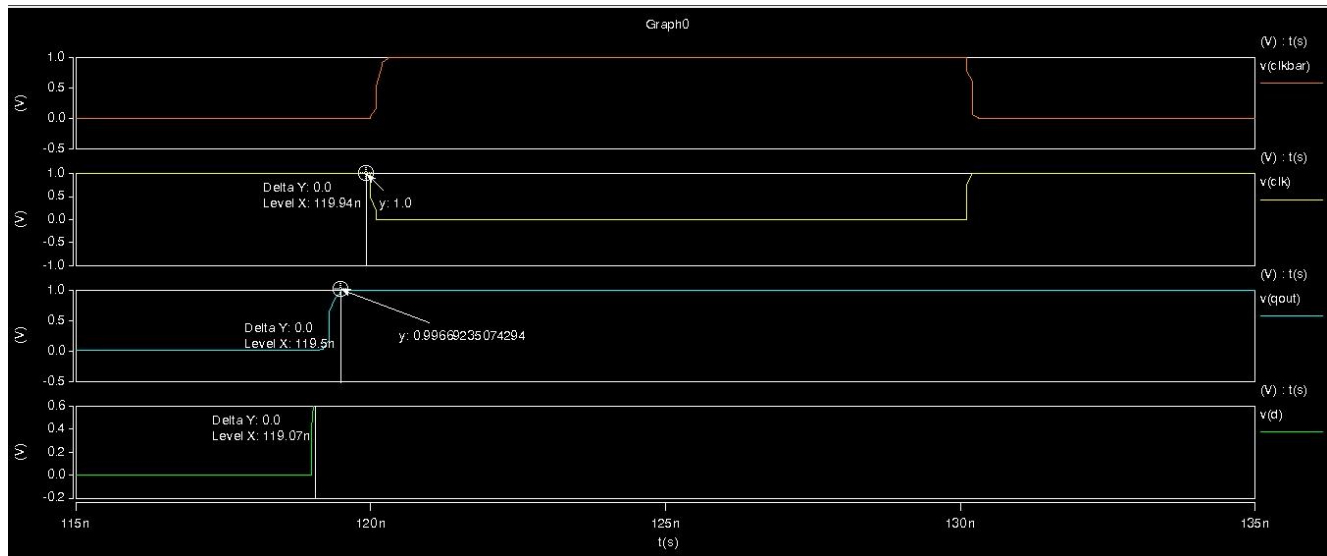
## Falling edge Flip-Flop



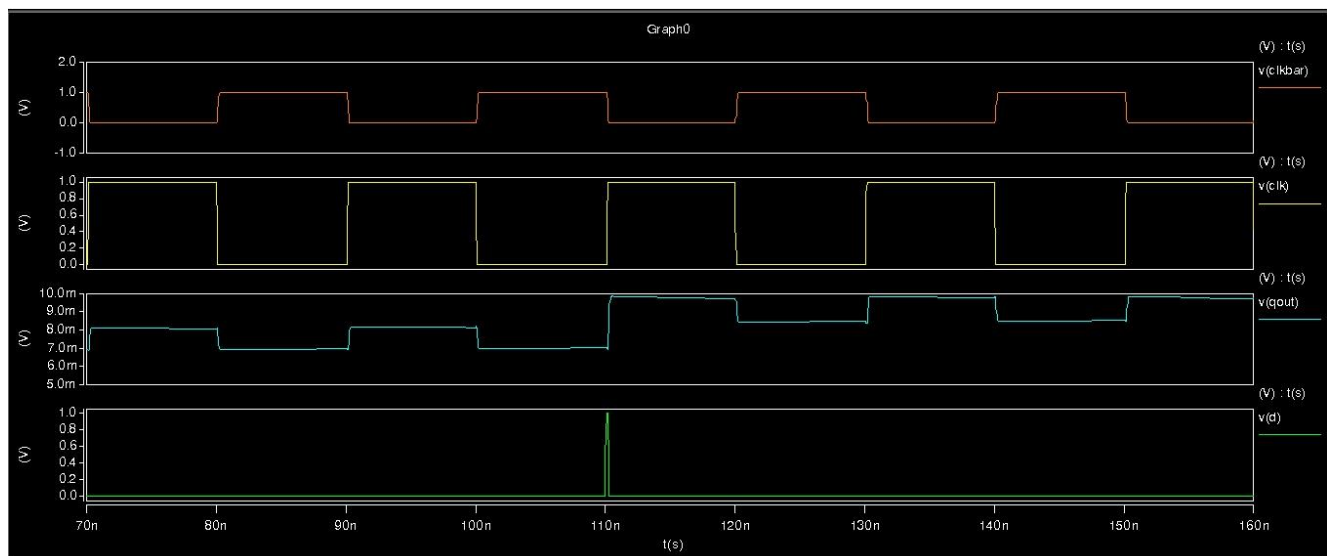
شکل 5: Inputs/ Outputs



شکل 6: Fall and Rise Time

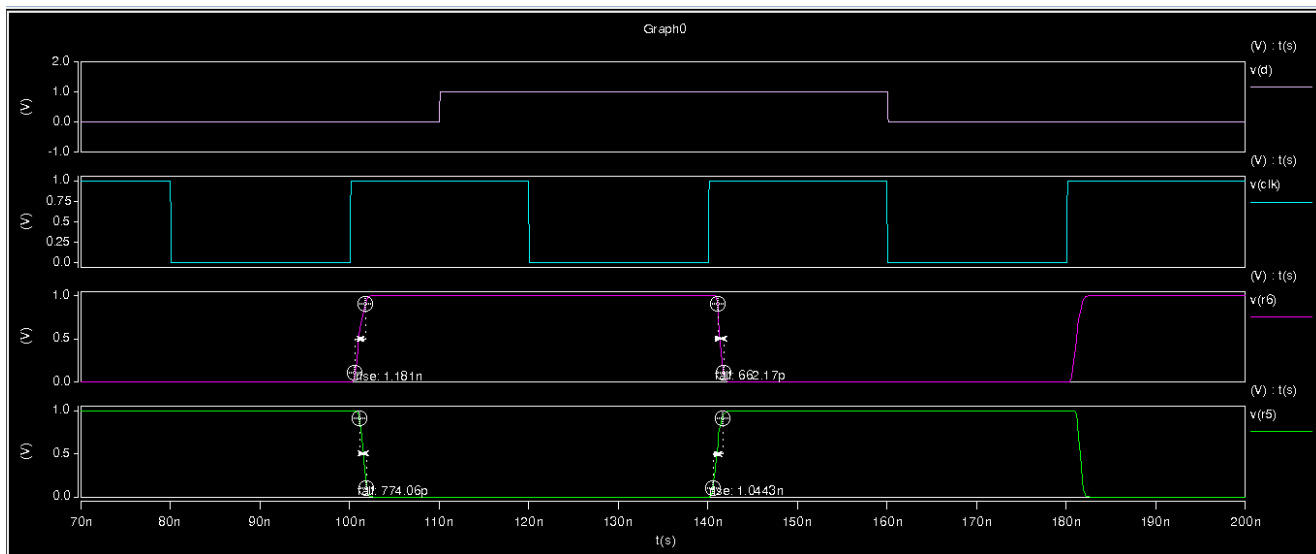


شکل 7: clock to Q / Setup Time / Hold Time

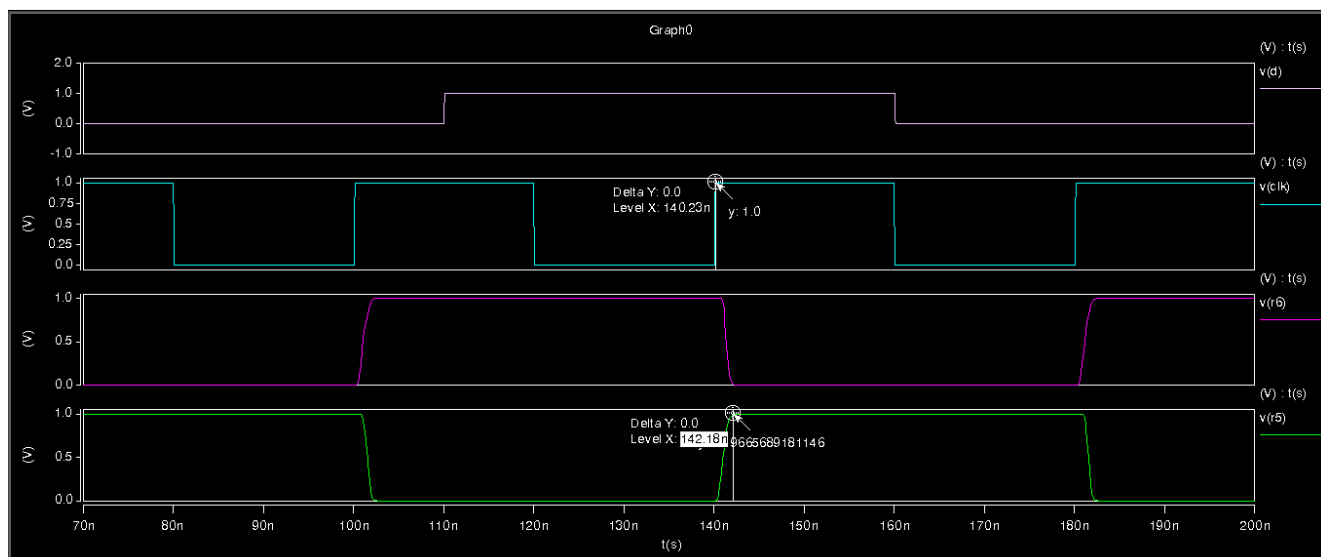


شکل 8: Glitch Effect in Output

## Rising edge Flip-Flop

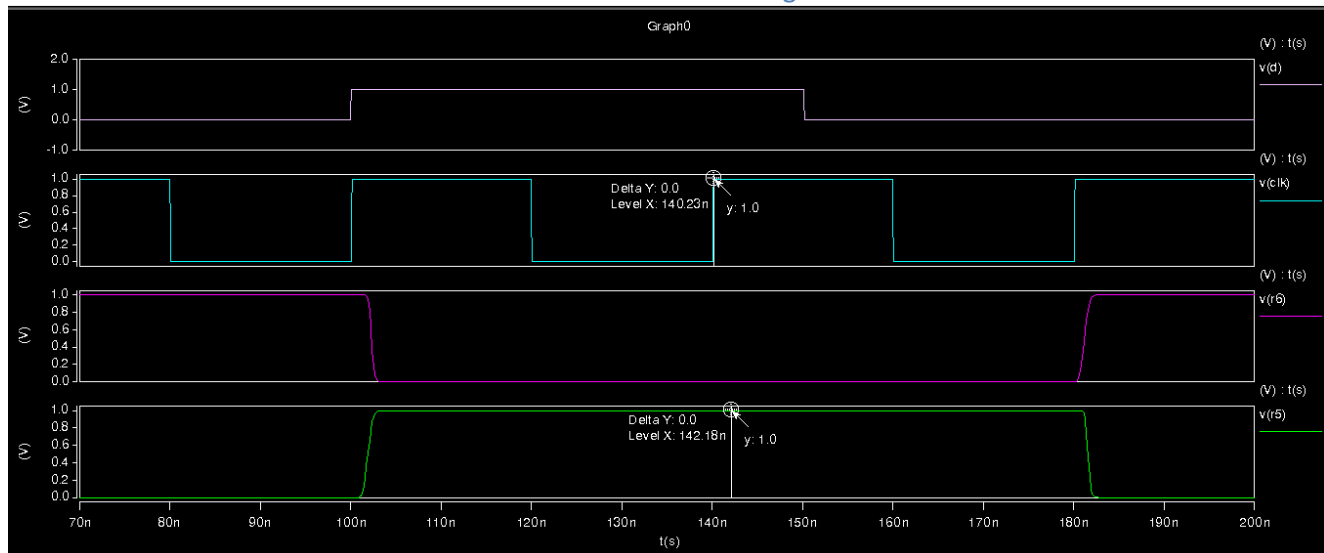


شکل 9: Fall and Rise Time

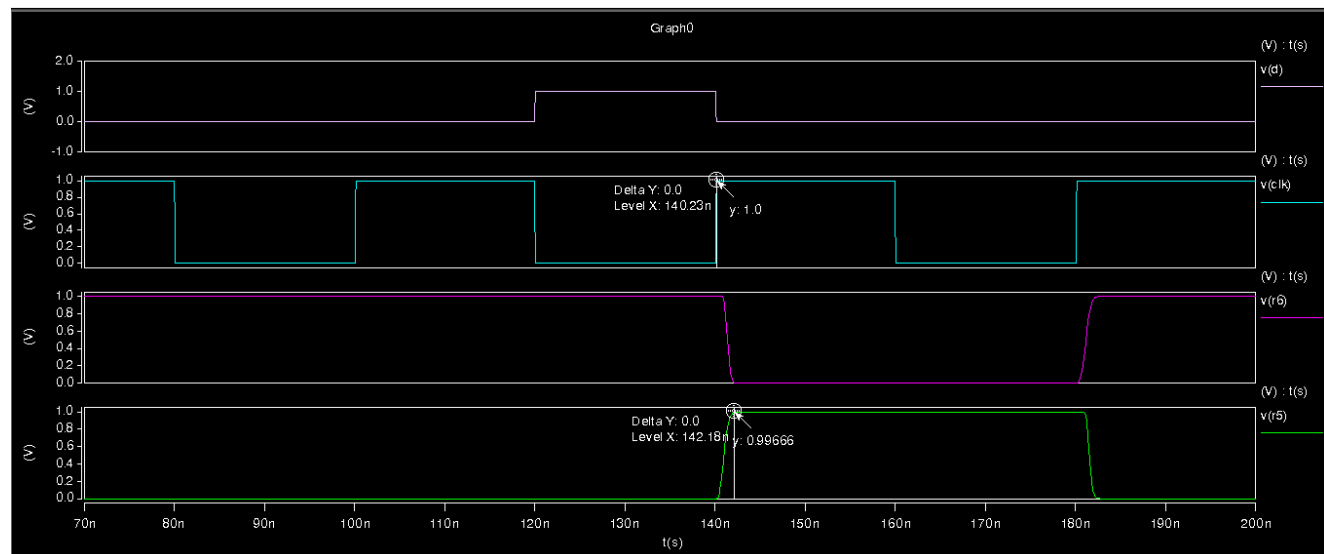


شکل 10: clock to Q

## CA4-Electronic Digital



شکل : Setup time =0



شکل : Hold Time=0