

3.5.1:

The following values indicate QUANTUM = 10:

```
[13]: [997]
[13]: [998]
[13]: [999]
[13]: [1000]
Child num[1] --> CBT= 3575, TT= 8725, WT=1888
Child num[2] --> CBT= 3541, TT= 8779, WT=1816
Child num[3] --> CBT= 3645, TT= 9173, WT=1901
Child num[4] --> CBT= 3776, TT= 9431, WT=2066
Child num[5] --> CBT= 3827, TT= 9462, WT=2021
Child num[6] --> CBT= 3842, TT= 9557, WT=2043
Child num[7] --> CBT= 3422, TT= 9567, WT=2007
Child num[8] --> CBT= 3773, TT= 9677, WT=2066
Child num[9] --> CBT= 3716, TT= 9814, WT=2039
Child num[10] --> CBT= 3673, TT= 9824, WT=2066
Average CBT= 3679, Average TT= 9400, Average WT= 1976
$
```

Average CBT= 3679, Average Turnaroundtime= 9400 and Average Waitingtime= 1976

The Following values indicate QUANTUM = 20:

```
[13]: [998]
[13]: [999]
[13]: [1000]
Child num[1] --> CBT= 1685, TT= 3814, WT=804
Child num[2] --> CBT= 1765, TT= 4072, WT=869
Child num[3] --> CBT= 1739, TT= 4072, WT=852
Child num[4] --> CBT= 1848, TT= 4362, WT=986
Child num[5] --> CBT= 1828, TT= 4401, WT=962
Child num[6] --> CBT= 1748, TT= 4441, WT=969
Child num[7] --> CBT= 1916, TT= 4516, WT=950
Child num[8] --> CBT= 1751, TT= 4562, WT=988
Child num[9] --> CBT= 1820, TT= 4638, WT=1053
Child num[10] --> CBT= 1807, TT= 4664, WT=1003
Average CBT= 1790, Average TT= 4354, Average WT= 943
$
```

Average CBT=1790, Average Turnaroundtime= 4354 and Average Waitingtime= 943

The Following values indicate QUANTUM = 5:

```
[13]: [999]
[13]: [1000]
Child num[1] --> CBT= 2086, TT= 4779, WT=1068
Child num[2] --> CBT= 1912, TT= 4902, WT=1189
Child num[3] --> CBT= 2095, TT= 5096, WT=1228
Child num[4] --> CBT= 2110, TT= 5111, WT=1187
Child num[5] --> CBT= 1921, TT= 5163, WT=1256
Child num[6] --> CBT= 2034, TT= 5228, WT=1179
Child num[7] --> CBT= 2048, TT= 5252, WT=1274
Child num[8] --> CBT= 2104, TT= 5326, WT=1223
Child num[9] --> CBT= 2096, TT= 5364, WT=1238
Child num[10] --> CBT= 2132, TT= 5456, WT=1253
Average CBT= 2053, Average TT= 5167, Average WT= 1289
$
```

Average CBT= 2053, Average Turnaroundtime= 5167 and Average Waitingtime= 1289

Quantum = 20 seems to be better than other alternatives.

3.5.2:

```

/child num[4] --> CBT= 1584,TT= 6526, WT=1961
/.....
/child num[5] --> CBT= 1463,TT= 6596, WT=2111
/.....
/child num[6] --> CBT= 1381,TT= 6669, WT=2866
/.....
/child num[7] --> CBT= 1438,TT= 6910, WT=2189
/.....
/child num[8] --> CBT= 1269,TT= 7033, WT=2375
/.....
/child num[9] --> CBT= 1515,TT= 7070, WT=2196
/.....
/child num[10] --> CBT= 1586,TT= 7098, WT=2281
/.....
/child num[11] --> CBT= 1227,TT= 7252, WT=2542
/.....
/child num[12] --> CBT= 1275,TT= 7667, WT=2656
/.....
/child num[13] --> CBT= 1734,TT= 7936, WT=2422
/.....
/child num[14] --> CBT= 1128,TT= 8310, WT=2958
/.....
/child num[15] --> CBT= 1377,TT= 8409, WT=2900
/.....
/child num[16] --> CBT= 1273,TT= 8584, WT=2917
/.....
/child num[17] --> CBT= 1275,TT= 8786, WT=2917
/.....
/child num[18] --> CBT= 1390,TT= 8928, WT=2984
/.....
/child num[19] --> CBT= 1405,TT= 8956, WT=3017
/.....
/child num[20] --> CBT= 1351,TT= 8951, WT=2769
/.....
/child num[21] --> CBT= 1348,TT= 9053, WT=3051
/.....
/child num[22] --> CBT= 1222,TT= 9121, WT=2996
/.....
/child num[23] --> CBT= 1298,TT= 9178, WT=2972
/.....
/child num[24] --> CBT= 1287,TT= 9232, WT=2974
/.....
/child num[25] --> CBT= 1671,TT= 9290, WT=3143
/.....
/group w/ [1] Priority --> AverageCBT= 1424, AverageTT= 6308, AverageWT= 1929
/.....
/group w/ [2] Priority --> AverageCBT= 1437, AverageTT= 6956, AverageWT= 2221
/.....
/group w/ [3] Priority --> AverageCBT= 1348, AverageTT= 7914, AverageWT= 2695
/.....
/group w/ [4] Priority --> AverageCBT= 1338, AverageTT= 8841, AverageWT= 2920
/.....
/group w/ [5] Priority --> AverageCBT= 1365, AverageTT= 9174, AverageWT= 3027
/.....
/average CBT= 1382, Average TT= 7839, Average WT= 2558
$
```

Processes with higher priority's(lower in priority size) enter the cpu sooner and have smaller turnaroundtimes.