

Assignment-01

- At the start, the program asks for user input indicating the number of child processes to be created, say n .
- The parent process then initializes an array (having $2n$ elements) with random numbers in the range of 0-10.
- Parent then creates n processes and waits for results from them.
- Each child process once created, somehow identifies its creation number amongst n processes created. Hint: you can assume the pids assigned to the child processes being assigned in incremental order starting from $\text{parentpid}+1$.
- Each child process then sums up the appropriate 2 array elements and sends the sum to parent process,
- Parent process on receiving the individual sum, calculates and displays the global sum.

Assignment-01

```
[>./assignment
Please enter the number of child processes:
3
The elements of the array are: 0 6 8 1 8 4

Parent: 50920 created child:50921
Child: 50921 Local Sum:0+6=6
Parent: 50920 created child:50922
Child: 50922 Local Sum:8+1=9
Parent: 50920 created child:50923
Child: 50923 Local Sum:8+4=12
Parent: 50920Sum: 27
>
```

Assignment-01

```
[>./assignment  
Please enter the number of child processes:  
4  
The elements of the array are: 7 2 2 1 8 8 7 0  
  
Parent: 50971 created child:50972  
Child: 50972 Local Sum:7+2=9  
Parent: 50971 created child:50973  
Child: 50973 Local Sum:2+1=3  
Parent: 50971 created child:50974  
Child: 50974 Local Sum:8+8=16  
Parent: 50971 created child:50975  
Child: 50975 Local Sum:7+0=7  
Parent: 50971Sum: 35  
>
```