**Quiz 1 Marks 10**

Suppose there are two processes child A and parent B. Which takes an input of M, N from command line arguments. Child A is creating an array of random numbers of size N. The random numbers are between 0-100. Child sends this M arrays of random numbers to parent. Parent finds the even numbers from these particular arrays and send those numbers to a third process (array.cpp) and array.cpp finds the average of this array of even numbers.

For example if user specifies 20,5 through command line arguments,

It means Child A will create 20 arrays of size 5 and send them to parent one by one.

Parent receives each array and after findings the even numbers, it stores them to a separate array C.

When Child A finishes sending the numbers, Parent sends array C to a third process (array.cpp).

Whereas third process (array.cpp) finds the average of arrays C received from other process.

Code to generate random numbers between 0-100 is given as:

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

int main() {

int i;

// Seed the random number generator using the current time

srand(time(NULL));

printf("Random numbers between 0 and 100:\n");

for (i = 0; i < 10; ++i) {

int randomNumber = rand() % 101; // Generate random number between 0 and 100

printf("%d\n", randomNumber);

}

return 0;

}