

HW 2 -3600 Operating System

Answer the below questions (1 and 2) by giving a search using Google **(1 points)**

1. Parent of all processes in UNIX OS is _____.
2. Parent of all App Processes in Anroid OS is _____ .
3. Consider a parent process that has forked a child in the code snippet below.

```
int count = 0;
ret = fork();
if(ret == 0) {
    printf("count in child=%d\n", count);
}
else {
    count = 1;
}
```

The parent executes the statement "count = 1" before the child executes for the first time. Now, what is the value of count printed by the code above?Justify your answer. **(4 points)**

4. Write a c program to implement threads. Accept an array of 40 integers, write a thread method named sum of array elements. Divide the array into 4 equal elements and call threads to find the sum of each part. Store the sum in a variable called 'arrays' . Print the sum in the main function. **(8 points for program and 2 points for screenshot of output)**

What to turn in Canvas: 2 files

1. Submit answers from Q1 to Q3,screenshot of output of Q4 in a pdf document.
2. Submit the program for Q4 as a separate c program file with the name "yourname.c"