## **by James Collins**

In 1976, my company hired the children of employees who were college graduates as interns. They were allocated to various elements of the company where there was a need to fill in labor to cover vacation shortages. The program manager for the major military program we were manufacturing called me into his office.

"Jim, I know we've had a number of altercations over the past few years but I'm wondering if I could ask you for a favor."

"Sure, what is it?"

"My son Andy has just completed his first year at Harvard. You know he graduated at the top of his class from Regis High School in New York; the all scholarship Jesuit school. Because of these credentials, he got into Harvard and is pursuing a degree in engineering. Since you are running the engineering ADVANCED RESEARCH programming department here, I was wondering if you would take him on as an intern. However, I would not want you to pick on him to get even with me. Can you give me an assurance on this?"

"Arian, I treat everybody who works for me equally. I hold no grudges and I never try to get even. I will be glad to bring your son on board and I will treat him fairly just like everyone else."

"Jim, thank you for that. However, I want you to work him hard. He's very smart and learns quickly but I want him challenged."

"No problem Arian, I will put him in with the new program development team. They are doing intense programming and can use the extra help. I'll tell the manager to load him up and give him all the overtime he can handle."

The first week in May, school let out. Andy showed up and went right to work. The team he was assigned to was working on the leading edge of programming aspects of the new computer technology. He worked side-by-side with the top programmers in the company. Years later, two of them became the leading programmers for major corporations on 128 and the manager ended up as a senior vice president for an engineering company up in Maine. Andy was working with the best of the best.

During Christmas week, my secretary received a call from Andy asking for a meeting with me at my convenience. I told her to set it up as soon as possible. I hoped he was requesting an additional summer internship the following year with us.

Andy showed up the appointed time, came in, shook hands and we exchange a few pleasantries.

"Mr. Collins, I have to ask you what did you do to me last summer?"

Stunned, I said "I don't think I understand what you're referring to. I did nothing different to you than I did to anybody else."

"Mr. Collins, I left here last year in the end the end of August and went back to Harvard as a sophomore. I am now in charge of the Harvard programming laboratory for the graduate school. How did that happen? What did you do to me?"

"Andy I'm glad that is your only problem. I think I can explain it to you if we do the math. How many programming classes do you need to get an undergraduate degree at Harvard?"

"For undergraduate you need five classes. I completed one before I showed up for your summer job."

"How many programming classes do you need for a graduate degree in programming?"

"An additional four classes."

"How many credits are assigned for an individual programming course?"

"All of them are three credit courses."

"How many hours do you spend for each credit?"

"Fifteen hours per credit or 45 hours per course."

"How many hours a week did you work for me last summer?"

"Each week I worked 40 hours straight time and 10 hours over time for a total of 50 hours."

"So for every week you work for me last summer you completed the time for a single Harvard programming class."

"How many weeks did you work for me last summer?"

"I worked a total of 14 weeks last summer. Oh, now I understand. I worked the equivalent of more classes than both the undergraduate and graduate degree requirements at Harvard. I can't thank you enough and I am looking forward to coming back this summer if you will have me."

"The job is yours."

Andy worked with us for another summer and for a major corporate giant at the end of his junior year. Eventually Andy became the vice president of AT&T and at present is a major executive for another engineering corporation.

THE END