

Problem statement

IT South Pacific, a software company in Suva requires its annual budgetary report on IT staff salaries. This company's 7 job titles and corresponding salaries are shown below in Table 1.1.

TABLE 1.1 Job Titles and corresponding Salaries

Job Title	Yearly Salary
Trainee_Programmer	15000
Programmer	20000
Analyst_Programmer	25000
Senior_Analyst_Programmer	30000
Database_Administrator	30000
Assistant_Manager	35000
Manager	40000

According to company's policy there cannot be more than 20 IT staff members at one time. Currently 12 IT positions are filled which can change when new staff members are recruited or old members have resigned. The details of current staff members are shown below in Table 1.2.

TABLE 1.2 Individual Staff Members and their Job Titles

Staff	Job Title
John	Trainee_Programmer
Sam	Analyst_Programmer
Brown	Programmer
White	Programmer
Merry	Trainee_Programmer
Tom	Analyst_Programmer
Harry	Programmer
Frank	Trainee_Programmer
Joe	Manager
Sony	Assistant_Manager
Angela	Trainee_Programmer
Karl	Database_Administrator

Assume these positions will be filled throughout the year. Now produce the summarized report to get individual job titles and their corresponding total salaries in the following format:

```
G:\CS112 2009\Assignments\Assignment 1\assign1.exe
Annual Budget Report.....
Job Title                Total Salary
Trainee_Programmer      60000
Programmer              60000
Analyst_Programmer      50000
Senior_Analyst_Programmer 0
Database_Administrator  30000
Assistant_Manager       35000
Manager                 40000

Total budget allocated: $275000
Press any key to continue . . . _
```

Requirements

1. Write a program to store the table for Job Titles and corresponding Salaries i.e. data shown in Table 1.1.
2. Write a function *void print_salary_table(?)* to print the table stored in question 1.
3. Write a search function *int salary_index(string job_title)* to find the array index from the given job title. For example return 0 for Trainee_Programmer, 1 for Programmer and so on.
4. Use the information given in Table 1.2 to determine the total amount of salaries for each job title. [Hint: Determine total individual job titles in order to determine total salaries for individual job title]
5. Make a function *print_annual_budget* to print the table for job titles and sum of salaries as shown in Fig 1.1.
6. Additional bonus marks will be given for using 2 dimensional arrays.
DO NOT VALIDATE ANY KEYBOARD ENTRY UNLESS OTHERWISE SPECIFIED

Use the following code to check for file error

```
if (input.fail()){
cerr<<"File not found!"<<endl;
system("PAUSE");
return 0;
}
```

Use if possible:

1. `char *_itoa(int value, char *string, int radix)`

Converts int to string

2. `int atoi(const char *string)`

Converts string to int

3. `string str;`

`const char *cpt;`

`cpt = str.c_str();`

Converts string to const char*

4. **String formatting using `<iomanip.h>` header file**

Study about `<iomanip.h>`, `setiosflag(?)` and `setw(?)` to represent the data nicely in tabular

format