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Introducing to programming

Task 1

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The program is like a basic version of student information system. Basely it can create students that certainly matchless or it can take information about students. Then it can do any calculate operations and announces informations for user. At the begin this program separates two paths with uses switch. Then separates eight paths with uses switch. First switch is used to prefer to create random student or to give details for student. Second switch is used to prefer which operation do on informations that belong to student.

The program has four arrays:

1. Names array includes 30 names.
2. Surnames array includes 30 surnames.
3. Stack array includes 100 student details. Students are type student.
4. Notes array includes 100 marks that are calculated.

The program has two structs:

1. Date struct includes birthday details.
2. Student struct includes personal details like name, surname and marks.

The program includes four functions:

1. student read(): it is used to give details about students.
2. student random_student(): it is used to create random students. Marks that
10 percent is in 0-40,
50 percent is in 40-70,
15 percent is in 70-80,
25 percent is in 80-100
3. void mark(student): it is used to convert marks from numbers to letters.
4. float calculate(student): it is used to calculate end term mark for students.
First and second quiz affect 7 percent in term mark.
First and second task affect 10 percent in term mark.
Project affects 16 percent in term mark.
Midterm exam affects 50 percent in term mark.

Final exam affects 45 percent end term mark.

In term mark affect 55 percent end term mark

First switch statement has two selection:

1. Create random students: With this way 100 students are created. Then every student take a name, a surname, a number and marks. And every member of stack is appointed array calculate to calculate their marks.
2. Fill specific student: With this way for every student blanks are opened and user fill the blanks. All marks are checked if they are in 0-100

Second switch statement has eight selection:

1. Print as a group of 20 students: With this way students are printed as a group of 20 students. Then if it is wanted to print next group is asked. Screen is deleted after every print. When reached end of the stack printing is stopped.
2. Find the highest mark: With this way all marks are compared. Then the mark that is found is appointed a variable and printed.
3. Find the lowest mark: With this way all marks are compared. Then the mark that is found is appointed a variable and printed.
4. Calculate average mark: With this way the average mark is found. Then it is printed.
5. Calculate standard deviation: With this way the standard deviation is found. Then it is printed.
6. Print marks that between two value: With this way two value are taken and compared which one is big. Then the marks which between two values are found and printed.
7. Print marks that less than a value: With this way a value is taken. Then the marks that less than the value are printed.
8. Print marks that bigger than a value: With this way a value is taken. Then the marks that bigger than the value and they are printed.