Practical Problems

1. Having a secure password is a very important practice, when much of our information is stored online. Write a function called ***String validatePassword***(String oldPassword, String newPassword) to validate the new password the user will enter by the user and return a message either a message with some error to reenter the password or an empty string that means a successful change. The main function will call ***validatePassword*** function. Write a program that validates a new password, following these rules:
   - The password must be at least 8 characters long.
   - The password must have at least one uppercase and one lowercase letter
   - The old password must not a part of the new password
   - The password must contain at least 1 digit.

   Write a program that asks for a password, then asks again to confirm it. If the passwords don't match or the rules are not fulfilled, prompt again. Your program

Sample output

```
Enter old Password : mazenkarimali
Enter new Password : mazenkarimali

Old Password can't be a part from new
New password must contain at least one digit
New password must contain at least one uppercase letter

Enter old Password : mazenkarimali
Enter new Password : Aliali2002001
Succeful Change !
```

2. A non-governmental organization needs a program to calculate the amount of financial assistance for needy families. The formula is as follows:

   • If the annual household income is between $30,000 and $40,000 and the household has at least three children, the amount is $1,000 per child.
   • If the annual household income is between $20,000 and $30,000 and the household has at least two children, the amount is $1,500 per child.
   • If the annual household income is less than $20,000, the amount is $2,000 per child.

   Implement a method for this computation. Write a program that asks for the household income and number of children for each applicant, printing the amount returned by your method. The user will enter values until the user use –1.