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TIFAC Core in Cyber Security

B.Tech, Cyber Security (CSE-CYS)

20CYS181 – Computer Programming Lab

Lab Evaluation 1

6th April 2022

Time: 2 Hours Total Marks: 20

Instructions:

1. Solve both questions. Each question is of 10 marks.
2. You need to copy the codes in a doc file and paste the screenshot of output.
3. Please verify all the test cases and share screenshots for those test cases.

Questions:

1. Write a Menu driven program "online Banking system" to allow the following options of transaction, assume that you are maintaining the account balance of Rs.X (Get 'x' from user should be >=500)
   Case 1: Withdrawal (W or w)
   The amount is detected from balance- The customer should have sufficient amount as balance or necessary error message need to be displayed. The customer must maintain minimum balance of Rs.500.
   Case 2: Deposit (D or d)
   The amount is added into the balance. account Eg: balance = balance + deposited Amount
   Case 3: Referring a friend (Y or y)
   When you refer a friend to the bank , you will get a bonus amount of Rs.50/person is added in to the balance.
   You have to do the operations mentioned above until user wants to continue to do so. Use quit (Q or q) option.

   Test Case 1:
   Enter user account balance: 5000
   Choose one of the below options:
   W or w for withdrawal.
   D or d for deposit.
   Y or y for referring a friend.
   Q or q to quit this portal.
   Enter your choice: W
   Enter amount to withdrawn: 4000
   Amount withdrawn successfully.

Remaining account balance is 1000

Choose one of the below options:
W or w for withdrawal.
D or d for deposit.
Y or y for referring a friend.
Q or q to quit this portal.
Enter your choice: w
Enter amount to withdrawn: 2000
Not sufficient balance.

Choose one of the below options:
W or w for withdrawal.
D or d for deposit.
Y or y for referring a friend.
Q or q to quit this portal.
Enter your choice: W
Enter amount to withdrawn: 800
Account minimum balance can’t be less than 500.

Test case 2:
Enter user account balance: 5000
Choose one of the below options:
W or w for withdrawal.
D or d for deposit.
Y or y for referring a friend.
Q or q to quit this portal.
Enter your choice: D
Amount to be deposited: 500
Amount added successfully.
Your account balance is 5500.

Test Case 3:
Enter user account balance: 5000
Choose one of the below options:
W or w for withdrawal.
D or d for deposit.
Y or y for referring a friend.
Q or q to quit this portal.
Enter your choice: Y
Referral has been added.
Your account balance is 5050.

Test case 4:

Enter user account balance: 5000
Choose one of the below options:
W or w for withdrawal.
D or d for deposit.
Y or y for referring a friend.
Q or q to quit this portal.
Enter your choice: Q
Thank you.

2. Write a menu driven C program to display:-

   Case 1: Power of number. Given a,b, you need to find (ab).

   Case 2: GCD (HCF) of 2 numbers.

   Case 3: Write a program to print all prime numbers between 1 and number entered by user.

   Note: create function for each choice.

   Test case 1:
   Choose from below options:
   1 for finding power of a number.
   2 for finding GCD(HCF) of 2 numbers.
   3 for printing all primes between 1 and given number.
   4 for quitting this program.
   Enter your choice: 1
   Enter base number: 2
   Enter exponent: 4
   2^4 = 16

   Choose from below options:
   1 for finding power of a number.
   2 for finding GCD(HCF) of 2 numbers.
   3 for printing all primes between 1 and given number.
   4 for quitting this program.
   Enter your choice: 2
   Enter 1st number: 6
   Enter 2nd number: 10
   GCD of 6 and 10 is 2

   Choose from below options:
   1 for finding power of a number.
   2 for finding GCD(HCF) of 2 numbers.
   3 for printing all primes between 1 and given number.

4 for quitting this program.
Enter your choice: 3
Enter final number: 20
The primes between 1 and 20 are
2
3
5
7
11
13
17
19

Choose from below options:
1 for finding power of a number.
2 for finding GCD(HCF) of 2 numbers.
3 for printing all primes between 1 and given number.
4 for quitting this program.
Enter your choice: 5
Invalid choice, please choose between 1-4.

Choose from below options:
1 for finding power of a number.
2 for finding GCD(HCF) of 2 numbers.
3 for printing all primes between 1 and given number.
4 for quitting this program.
Enter your choice: 4
Thank you.