Assignment2

Q1

//using scanf()

/\*Accept the price from user. Ask the user if he is a student (user may say yes or

no). If he is a student and he has purchased more than 500 than discount is 20%

otherwise discount is 10%.But if he is not a student then if he has purchased

more than 600 discount is 15% otherwise there is not discount\*/

#include<stdio.h>

void main(){

float bill,dis;

printf("\n 1.student \n 2. not a student");

int user;

printf("Enter the user num:");

scanf("%d",&user);

printf("\nEnter the bill:");

scanf("%f",&bill);

float bill\_ini=bill;

if(user==1){

if(bill>500){

dis=bill\*0.2;

bill=bill-dis;

}

else{

dis=bill\*0.1;

bill=bill-dis;

}

}else{

if(user==2){

if(bill>600){

dis=bill\*0.15;

bill=bill-dis;

}

else{

printf("no discount");

}

}

else{

printf("invalid inputs");

}

}

printf("\n the original bill is Rs. %f and after dis is Rs. %f",bill\_ini,bill);

}

Q2

//using scanf()

//greatest no. among 3

#include<stdio.h>

void main(){

int num1,num2,num3;

printf("Enter num1:");

scanf("%d",&num1);

printf("\nEnter num2:");

scanf("%d",&num2);

printf("\nEnter num3 :");

scanf("%d",&num3);

if(num1>num2){

if(num1>num3){

printf("\nnum1 is greatest %d",num1);

}

else{

printf("\nnum2 is greatest %d",num2);

}

}

else{

if(num2>num3){

printf("\nnum2 is greatest %d",num2);

}

else{

printf("\nnum3 is greatest %d",num3);

}

}

}

Q3.1

//using scanf()//Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desiredoperations.(without using scanf)

#include<stdio.h>

void main(){

char sign;

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

//when we use scanf with %c have to clear the buffer (\n \t enter tab space etc)

fflush(stdin);//to clean the buffer

printf("Enter the sign:");

scanf("%c",&sign);

if(sign=='+'){

res=num1+num2;

}

else{

if(sign=='-'){

res=num1-num2;

}

else{

if (sign=='/'){

res=num1/num2;

}

else{

if(sign=='\*'){

res=num1\*num2;

}

else{

if(sign=='%'){

res=num1%num2;

}

else{

printf("Invalid Inputs");

}

}

}

}

}

printf("the operator is %c and the num1 is %d and num2 is %d result is %d",sign,num1,num2,res);

}

Q3.2

//using scanf

//Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desiredoperations.(without scanf)

#include<stdio.h>

void main(){

printf("\n 1.add \n 2. sub \n 3.div \n 4.mul \n 5.mod \n\n");

int num1,num2,res;

int choice;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2");

scanf("%d",&num2);

printf("Enter choice:");

scanf("%d",&choice);

if(choice==1){

res=num1+num2;

}else{

if(choice==2){

res=num1-num2;

}

else{

if(choice==3){

res=num1/num2;

}

else{

if(choice==4){

res=num1/num2;

}else{

if(choice==5){

res=num1%num2;

}

else{

printf("\nInvalid Inputs");

}

}

}

}

}

printf("\n the choice is %d and num1 is %d num2 is %d res is %d",choice,num1,num2,res);

}

Q4

//using scanf

//4. Display a menu to the user (like 1.Even Odd 2. Basic salary etc), ask the user to enter his choice,then based on that perform the desired operations

#include<stdio.h>

void main(){

int choice=2;

printf("1.even odd \n 2.basic\_salary");

printf("\nEnter the choice:");

scanf("%d",&choice);

int num;

float basic\_s,total;

float da,ta,hra;

if(choice==1){

printf("\nEnter the number to check even odd :");

scanf("%d",&num);

if(num%2==0)

{

printf("\neven number");

}

else{

printf("\nodd number");

}

}else{

if(choice==2){

printf("\nEnter the basic salary:");

scanf("%f",&basic\_s);

if(basic\_s<=5000){

da=basic\_s\*0.1;

ta=basic\_s\*0.2;

hra=basic\_s\*0.25;

}

else{

da=basic\_s\*0.15;

ta=basic\_s\*0.20;

hra=basic\_s\*0.25;

}

total=basic\_s+da+ta+hra;

printf("\nThe basic salary is %f and the total is %f",basic\_s,total);

}

else{

printf("\nInvalid inputs");

}

}

}

Q5

//using scanf()

/\*Accept the price from user. Ask the user if he is a student (user may say yes or

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void main(){

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printf("\nEnter the bill:");

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bill=bill-dis;

}

else{

dis=bill\*0.1;

bill=bill-dis;

}

}else{

if(user==2){

if(bill>600){

dis=bill\*0.15;

bill=bill-dis;

}

else{

printf("no discount");

}

}

else{

printf("invalid inputs");

}

}

printf("\n the original bill is Rs. %f and after dis is Rs. %f",bill\_ini,bill);

}

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