Assignment 5

Assignment1

1. Finding F from C (temp)

//function without parameters without returntype

//findind F from C (temp)

#include<stdio.h>

void F\_C();

void main(){

F\_C();

}

void F\_C(){

float C=12.3;

float F;

F=(C\*9/5)+32;

printf(" c is %f and its F is %f",C,F);

}

2

. Finding area and perimeter of rectangle or circle

//function without parameters without returntype

//find area of rectangle and circle

#include<stdio.h>

void cicle();

void rectangle();

void main(){

circle();

rectangle();

}

void circle(){

float radius=3.5,pie=3.14,area\_C,perimeter\_C;

area\_C=pie\*radius\*radius;

perimeter\_C=2\*pie\*radius;

printf("\narea of circle is %f",area\_C);

printf("\nperimeter of circle is %f\n",perimeter\_C);

}

void rectangle(){

float length=12.3,breadth=10,area\_R,perimeter\_R;

area\_R=length\*breadth;

perimeter\_R=2\*(length+breadth);

printf("\narea of rectangle is %f",area\_R);

printf("\nperimeter of rectangle is %f",perimeter\_R);

}

1. 3. Accept a 3 digit number from user and find the sum of the digits and also reverse the numbe

////function without parameters without returntype

//accept 3 digit num ,sum the digits and reverse

#include<stdio.h>

//declaration

void sum();

void rev();

void main(){

sum();

rev();

}

//defination

void sum(){

int num=123,sum,rev;

int r1,r2,r3,q1,q2,q3;

r1=num%10;

q1=num/10;

r2=q1%10;

q2=q1/10;

r3=q2%10;

q3=q2/10;

sum=r1+r2+r3;

printf("\nThe sum of the digit is %d ",sum);

}

void rev(){

int num=123,sum,rev;

int r1,r2,r3,q1,q2,q3;

r1=num%10;

q1=num/10;

r2=q1%10;

q2=q1/10;

r3=q2%10;

q3=q2/10;

rev=(r1\*100)+(r3\*10)+(r3\*1);

printf("\nThe reverse of the number is %d",rev);

}

1. Check if the given number is even or odd.

//function without parameters without returntype

//check even and odd

#include<stdio.h>

//declaration

void even\_Odd();

void main(){

//call

even\_Odd();

}

//defination

void even\_Odd(){

int num;

printf("Enter the num:");

scanf("%d",&num);

if(num%2==0){

printf("Even number");

}

else

{

printf("odd number");

}

}

5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.

////function without parameters without returntype

//total salary

#include<stdio.h>

//declaration

void total\_sal()

void main(){

total\_sal();

}

//defination

void total\_sal(){

float basic=3000,total;

float da,ta,hra,a;

if(basic<=5000){

//printf("a is %f",a=10/100);// 10/100 it is internally is a int so int /int gives int therfore it gives o

//da=basic\*(10/100); eihter make any one float or convert into 0.1

da=basic\*0.1;

printf("\nda is %f",da);

ta=basic\*0.2;

printf("\nta is %f",ta);

hra=basic\*0.25;

printf("\nhra is %f",hra);

}

else{

da=basic\*(15/100);

ta=basic\*(20/100);

hra=basic\*(25/100);

}

total=basic+da+ta+hra;

printf("\nThe total salary is %f",total);

}

6. Write a program to check if person is eligible to marry or not (male age >=21 and female age>=18

//function without parameters without returntype

//eligible for marriage

#include<stdio.h>

void eligible();

void main(){

eligible();

}

void eligible(){

char gender='M';//input either 'F' or 'M'

int age=18;

if(gender=='F'){

if(age>=18){

printf("Female is eligible for Marriage");

}

else{

printf("female is not eligible");

}

}

else{

if(gender=='M'){

if(age>=21){

printf("Male is eligible for marriage");

}

else{

printf("Male is not eligible");

}

}

else{

printf("invaild input");

}

}

}

////////////

Assignment2

1. Find the price of item when discount is given (specify different discount based on price)

////function without parameters without returntype

//using scanf()

//Find the price of item when discount is given (specify different discount based on price)

#include<stdio.h>

//declaration

void discount();

void main(){

//call

discount();

}

//defination

void discount(){

float price,dis;

//take the price from user

printf("Enter the price : ");

scanf("%f",&price);

float price\_Ini=price;

if(price>=5000 && price<=7000){

dis=price\*0.2;

price=price-dis;

}

else{

if(price>=3000&&price<5000){

dis=price\*0.15;

price=price-dis;

}

else{

if(price<3000){

dis=price\*0.05;

price=price-dis;

}

else{

printf("invalid inputs");

}

}

}

printf("the original price is RS %f and after getting dis is RS %f ",price\_Ini,price);

}

2. Write a program to find greatest of three numbers using nested if-else.

////function without parameters without returntype

//using scanf()

//greatest no. among 3

#include<stdio.h>

//declaration

void greatest();

void main(){

//call

greatest();

}

//defination

void greatest(){

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);

}

}

}

3. Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desiredoperations.

////function without parameters without returntype

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

#include<stdio.h>

//declaration

void sum();

void sub();

void multi();

void mod();

void main(){

char sign;

//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=='+'){

sum();

}

else{

if(sign=='-'){

sub();

}

else{

if (sign=='/'){

div();

}

else{

if(sign=='\*'){

multi();

}

else{

if(sign=='%'){

mod();

}

else{

printf("Invalid Inputs");

}

}

}

}

}

}

void sum(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1+num2;

printf("addition is %d",res);

}

void sub(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1-num2;

printf("sub is %d",res);

}

void multi(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1\*num2;

printf("multiplication is %d",res);

}

void mod(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1%num2;

printf("mod is %d",res);

}

void div(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1/num2;

printf("div is %d",res);

}

////function without parameters without returntype

//using scanf

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

#include<stdio.h>

//declaration

void add();

void sub();

void div();

void multi();

void mod();

void main(){

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

int choice;

printf("Enter choice:");

scanf("%d",&choice);

if(choice==1){

add();

}else{

if(choice==2){

sub();

}

else{

if(choice==3){

div();

}

else{

if(choice==4){

multi();

}else{

if(choice==5){

mod();

}

else{

printf("\nInvalid Inputs");

}

}

}

}

}

}

//defination

void add(){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1+num2;

printf("addition is %d :",res);

}

void sub(){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1-num2;

printf("sub is %d :",res);

}

void multi(){

int num1,num2,res;

int choice;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1\*num2;

printf("multipliation is %d :",res);

}

void div(){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1/num2;

printf("division is %d :",res);

}

void mod(){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1%num2;

printf("mod is %d :",res);

}

1. 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.

////function without parameters without returntype

//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>

//declaration

void even\_Odd();

void basic\_salary();

void main(){

int choice=2;

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

printf("\nEnter the choice:");

scanf("%d",&choice);

if(choice==1){

even\_Odd();

}else{

if(choice==2){

basic\_salary();

}

else{

printf("\nInvalid inputs");

}

}

}

//definations

void even\_Odd(){

int num;

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

scanf("%d",&num);

if(num%2==0)

{

printf("\neven number");

}

else{

printf("\nodd number");

}

}

void basic\_salary(){

float basic\_s,total;

float da,ta,hra;

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);

}

5. 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

////function without parameters without returntype

//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>

//declaration

void billing();

void main(){

billing();

}

void billing(){

float bill,dis;

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

int user;

printf("\nEnter 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);

}

//////////////////assignment 3

1. Print numbes from 1 to 10.

//print no from 1 to 10

#include<stdio.h>

//declaration

void print\_num();

void main(){

print\_num();//call

}

//defination

void print\_num(){

int num;

printf("Enter the num:");

scanf("%d",&num);

int i=1;

while(i<=num){

printf("%d\n",i);

i++;

}

}

1. Print table for the given number.

//print table

#include<stdio.h>

void table();

void main(){

table();

}

void table(){

int num,a;

printf("Enter the num :");

scanf("%d",&num);

int i=0;

while(i<10){

a=++i;

printf("%d \* %d = %d \n",num,a,num\*a);

}

}

1. Calculate sum of numbers in the given range.
2. //sum of the number within given range
3. #include<stdio.h>
4. //declaration
5. void sum\_range();
6. void main(){
7. sum\_rang();//call
8. }
9. //defination
10. void sum\_rang(){
11. int start,end;
12. printf("Enter the start: ");
13. scanf("%d",&start);
15. printf("Enter the end : ");
16. scanf("%d",&end);
18. int sum=0;
20. int i=start;
21. while(i<=end){
22. sum=sum+i;
23. i++;
24. }
25. printf("sum from %d to %d is %d",start,end,sum);
26. }
27. Check number is prime or not.

//func without parameter without returntype

//prime number

#include<stdio.h>

//declaration

void prime();

void main(){

prime();//call

}

//defination

void prime(){

int num;

printf("Enter the num :");

scanf("%d",&num);

int i=2;

while(i<num){

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

printf("Number is prime");

}

else{

printf("number is not prime");

}

}

1. Check number is armstrong or not?

//function without parameters without returntype

//armstrong by count of digits//4 digit 1634 3digit 153

#include<stdio.h>

#include<math.h>

//declaration

void armstrong();

void main(){

//call

armstrong();

}

//defination

void armstrong(){

int num,rem;

printf("Enter the num:");

scanf("%d",&num);

int num\_O=num;

int num\_2=num;

int sum\_P=0;

int count=0;

while(num>0){

num=num/10;

count++;

}

while(num\_2>0){

rem=num\_2%10;

num\_2=num\_2/10;//dec

//pow(base,power)

//power=pow(rem,count);

//by using loop // to calculate the power as per count

int power=1;

int cnt=count;

while(cnt!=0){

power=power\*rem;

cnt--;

}

sum\_P=sum\_P+power;

}

if(num\_O==sum\_P)

{

printf("%d is armstrong number",num\_O);

}

else{

printf("%d is not an armstrong number",num\_O);

}

}

1. Check number is perfect or not.

//func without parameters without returns

//perfect number

//declaration of the func

void perfect();

#include<stdio.h>

void main(){

perfect();

}

void perfect(){

int num,sum\_Fac=0;

printf("Enter the num:");

scanf("%d",&num);

for(int i=1;i<num;i++){

if(num%i==0){

sum\_Fac=sum\_Fac+i;//adding factors here

}

}

// check it is perfect number or not

if(num==sum\_Fac){

printf("It is a perfect number %d",num);

}

else{

printf("It is not a perfect number %d",num);

}

}

1. Find factorial of number.

//factorial number

#include<stdio.h>

//declaration

void factorial();

void main(){

//call

factorial();

}

//defination

void factorial(){

int num,fact=1;

printf("Enter the num:");

scanf("%d",&num);

int i=num;

while(i>0){

fact=fact\*i;

printf("\n fact is %d and i is %d",fact,i);

i--;

}

printf("\n factorial of %d is %d",num,fact);

}

1. Check number is strong or not.

//strong number

#include<stdio.h>

//declaration

void strong();

void main(){

strong();//call

}

//defination

void strong(){

int num;

printf("Enter the num:");

scanf("%d",&num);

int num\_O=num,rem,sum\_fact=0;

while(num>0){

rem=num%10;

num=num/10;//inc /dec

//for factorial

int fact=1;//for each iteration it must be 1 initialy

while(rem>0){

fact=fact\*rem;

rem--;

}

sum\_fact=sum\_fact+fact;

}

//check the sum of fact of each digit

if(num\_O==sum\_fact){

printf("It is strong number %d",num\_O);

}

else{

printf("It is not strong number %d",num\_O);

}

}

1. Check the given number is palindrome or not?

//function without parameters without returns

//palindrom num -->num==reverse of that num

//declaration

void palindrome();

#include<stdio.h>

void main(){

palindrome();//call

}

//defination

void palindrome(){

int num;

printf("Enter the num:");

scanf("%d",&num);

int num\_O=num,rev=0;

// seperate the digits

int rem=0;

while(num>0){

rem=num%10;

num=num/10;

rev=rev\*10+rem;

}

if(rev==num\_O){

printf("The number is palindrom %d",num\_O);

}

else{

printf("The number is not palindrom %d ",num\_O);

}

}

10.Add the (first and last) digit of a given number

//sum of first and last digit of the number

#include<stdio.h>

void sum\_F\_L();

void main(){

sum\_F\_L();//call

}

void sum\_F\_L(){

int num;

printf("Enter the num");

scanf("%d",&num);

int O\_num=num;

int last\_digit,first\_digit,rem,sum=0;

last\_digit=num%10;

printf("\nlast %d",last\_digit);

while(num>0){

rem=num%10;

num=num/10;

}

first\_digit=rem;

printf("\nfirst %d",first\_digit);

sum=first\_digit+last\_digit;

printf("\nThe sum of last and first digit of the num %d is %d",O\_num,sum);

}

//////////////assignment 4

1. Print armstrong number in the the given range 1 to n?

//print the armstrong number in the given range

#include<stdio.h>

void armstrong();

void main(){

armstrong();

}

void armstrong(){

int k,end,rem;

printf("enter the end of the range");

scanf("%d",&end);

printf("armstrong numbers are : ");

for(k=1;k<=end;k++){

int num=k;

int num\_2=k;

//int num=num\_2=k; k==>num\_2 and num\_2==>num

int count=0;

int sum=0;

//to check the count

while(num>0){

num=num/10;

count++;

}

//sum of the power

while(num\_2>0){

rem=num\_2%10;

num\_2=num\_2/10;

//calculate the power

int power=1;

int cnt=count;

while(cnt!=0){

power=power\*rem;

cnt--;

}

sum=sum+power;

}

//check that number is equal to that sum of the power or not ?

if(sum==k){

printf(" %d\t",k);

}

}

}

1. Print prime number in the given range 1 to n?

//range prime

void prime();

#include<stdio.h>

void main(){

void prime();

}

void prime(){

int k,end;

printf("enter the end of the range :");

scanf("%d",&end);

for(k=1;k<=end;k++){

int num=k;

//check for each k the number is prime or not

int i=2;//start mod from 2 check up to 1 no before that number

while(i<num){

//check num is completely divisible or not

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

printf("%d\t",k);

}

}

}

1. check perfect number in the given range 1 to n?

//perfect number

#include<stdio.h>

void main(){

int k;

int end;

printf("Enter the end:");

scanf("%d",&end);

for(k=1;k<=end;k++){

int num=k;

int sum=0;

for(int i=1;i<num;i++){

if(num%i==0){

sum=sum+i;

}

}

if(k==sum){

printf("%d\n",k);

}

}

}

1. check strong number in the given range 1 to n?

//strong numbers

#include<stdio.h>

void strong();

void main(){

void strong();

}

void strong(){

int k,end,rem;

printf("Enter the end of the range:");

scanf("%d",&end);

printf("strong numbers are: ");

for(k=1;k<=end;k++){

int num=k;

int sum\_F=0;

while(num>0){

rem=num%10;

num=num/10;

//calculate the fact of each digits

int fact=1;

while(rem>0){

fact=fact\*rem;

rem--;

}

//sum of the fact of each digits

sum\_F=sum\_F+fact;

}

//equalate sum with original number

if(k==sum\_F){

printf("%d\t",k);

}

}

}

1. Print fibonacci series?(optional

//func without parameters without returntype

//fibonacci series

#include<stdio.h>

void fibonacci();

void main(){

fibonacci();

}

void fibonacci(){

int prefib1=0,prefib2=0,fib=0,end;

printf("Enter the range 0 to :");

scanf("%d",&end);

//solution to handle the infinity condition 1 1 1 1 -->(if)

if(prefib1==0 && prefib2==0){

fib=prefib2+prefib1;

printf("%d \t",fib);

prefib1++;

fib=prefib2+prefib1;

printf("%d\t",fib);

}

while(fib<=end)

{

prefib1=prefib2;

prefib2=fib;

fib=prefib2+prefib1;

if(fib<=end){

printf("%d\t",fib);

}

}

}

**Type 2**

assignment 1

1. Finding F from C (temp).

#include<stdio.h>

float f\_from\_c();

void main(){

float f=f\_from\_c();

printf("F is %f",f);

}

float f\_from\_c(){

float C=12.3;

float F;

F=((C\*9)/5)+32;

//printf("F is %d",F);

return F;

}

1. Finding area and perimeter of rectangle or circle.

//find area of rectangle and circle

#include<stdio.h>

void main(){

float a\_cir=area\_C();

float a\_rec=area\_R();

float peri\_cir=perimeter\_C();

float peri\_rec=perimeter\_R();

printf("\narea of rectangle is %f",a\_rec);

printf("\narea of circle is %f",a\_cir);

printf("\nperimeter of rectangle is %f",peri\_cir);

printf("\nperimeter of circle is %f",peri\_rec);

}

float area\_C(){

float radius=3.5,pie=3.14,area\_C;

area\_C=pie\*radius\*radius;

return area\_C;

}

float area\_R(){

float length=12.3,breadth=10,area\_R;

area\_R=length\*breadth;

return area\_R;

}

float perimeter\_R(){

float length=12.3,breadth=10,perimeter\_R;

perimeter\_R=2\*(length+breadth);

return perimeter\_R;

}

float perimeter\_C(){

float length=12.3,breadth=10,perimeter\_C;

perimeter\_C=2\*pie\*radius;

return perimeter\_C;

}

1. Accept a 3 digit number from user and find the sum of the digits and also reverse the number

//accept 3 digit num ,sum the digits and reverse

#include<stdio.h>

int sum\_digits();

int rev\_digit();

void main(){

int sum=sum\_digits();

printf("\nThe sum of the digit is %d ",sum);

int rev=rev\_digit();

printf("\nThe reverse of the number is %d",rev);

}

int sum\_digits(){

int num=123;

int rem,sum=0;

while(num>0){

rem=num%10;

num=num/10;

sum=sum+rem;

}

return sum;

}

int rev\_digit(){

int num=121;

int rem,rev=0;

while(num>0){

rem=num%10;

num=num/10;

rev=(rev\*10)+rem;

}

return rev;

}

1. Check if the given number is even or odd.

//check even and odd

#include<stdio.h>

void main(){

int num=5;

if(num%2==0){

printf("Even number");

}

else

{

printf("odd number");

}

}

5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively

//total salary

#include<stdio.h>

float basic\_s();

void main(){

float total=basic\_s();

printf("\nThe total salary is %f",total);

}

float basic\_s(){

float basic=3000,total;

float da,ta,hra,a;

if(basic<=5000){

//printf("a is %f",a=10/100);// 10/100 it is internally is a int so int /int gives int therfore it gives o

//da=basic\*(10/100); eihter make any one float or convert into 0.1

da=basic\*0.1;

//printf("\nda is %f",da);

ta=basic\*0.2;

//printf("\nta is %f",ta);

hra=basic\*0.25;

//printf("\nhra is %f",hra);

}

else{

da=basic\*(15/100);

ta=basic\*(20/100);

hra=basic\*(25/100);

}

total=basic+da+ta+hra;

return total;

}

. 6. Write a program to check if person is eligible to marry or not (male age >=21 and female age>=18)

//eligible for marriage

#include<stdio.h>

int eligible();

void main(){

int res=eligible();

if(res==1){

printf("Eligible");

}

else{

if(res==0){

printf("Not eligible");

}

else{

if(res== -1)

printf("Invalid Inputs");

}

}

}

int eligible(){

char gender;//input either 'F' or 'M'

fflush(stdin);

printf("M=male\n F=female\n");

printf("Enter gender :");

scanf("%c",&gender);

int age;

if(gender=='F'){

printf("Enter the age:");

scanf("%d",&age);

if(age>=18){

return 1;

}

else{

return 0;

}

}

else{

if(gender=='M'){

printf("Enter the age:");

scanf("%d",&age);

if(age>=21){

return 1;

}

else{

return 0;

}

}

else{

return -1;

}

}

}

Assignment2

1. Find the price of item when discount is given (specify different discount based on price)

//using scanf()

//Find the price of item when discount is given (specify different discount based on price)

#include<stdio.h>

float discount();

void main(){

float price=discount();

if(price!= -1){

printf("Discount is %f",price);

}

else{

printf("Invalid Inputs");

}

}

float discount(){

float price,dis;

//take the price from user

printf("Enter the price : ");

scanf("%f",&price);

if(price>=5000 && price<=7000){

dis=price\*0.2;

price=price-dis;

}

else{

if(price>=3000&&price<5000){

dis=price\*0.15;

price=price-dis;

return price;

}

else{

if(price<3000){

dis=price\*0.05;

price=price-dis;

return price;

}

else{

return -1;

}

}

}

}

2. Write a program to find greatest of three numbers using nested if-else.

//using scanf()

//greatest no. among 3

#include<stdio.h>

int greatest();

void main(){

int res=greatest();

printf("Greatest number is %d",res);

}

int greatest(){

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){

return num1;

}

else{

return num3;

}

}

else{

if(num2>num3){

return num2;

}

else{

return num3;

}

}

}

3. Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desiredoperations.

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

#include<stdio.h>

//func declaratoins

int add();

int sub();

int mul();

int div();

int mod();

char optor();

//main

void main(){

char sign=optor();

int res;

if(sign=='+'){

res=add();//call

printf("Additon is %d",res);

}

else{

if(sign=='-'){

res=sub();//call

printf("Substraction is %d",res);

}

else{

if (sign=='\*'){

res=mul();//call

printf("Multiplication is %d",res);

}

else{

if(sign=='/'){

res=div();//call

printf(" Division is %d",res);

}

else{

if(sign=='%'){

res=mod();//call

printf(" mod is %d",res);

}

else{

printf("Invalid Inputs");

}

}

}

}

}

}

//function defination

char optor(){

char sgn;

//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",&sgn);

return sgn;

}

int add(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1+num2;

return res;

}

int sub(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1-num2;

return res;

}

int mul(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1\*num2;

return res;

}

int div(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1/num2;

return res;

}

int mod(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1%num2;

return res;

}

//using scanf

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

//function declaration

int add();

int sub();

int mul();

int div();

int mod();

int optor();

#include<stdio.h>

void main(){

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

int choice=optor();

int res;

if(choice==1){

int res=add();

printf("addition is %d",res);

}else{

if(choice==2){

int res=sub();

printf("Substraction is %d",res);

}

else{

if(choice==3){

int res=mul();

printf("multiplication is %d",res);

}

else{

if(choice==4){

int res=div();

printf("Division is %d",res);

}else{

if(choice==5){

int res=mod();

printf("mod is %d",res);

}

else{

printf("\nInvalid Inputs");

}

}

}

}

}

}

//function defination

int optor(){

int choice;

printf("Enter choice:");

scanf("%d",&choice);

return choice;

}

int add(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1+num2;

return res;

}

int sub(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1-num2;

return res;

}

int mul(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1\*num2;

return res;

}

int div(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1/num2;

return res;

}

int mod(){

int num1,num2,res;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=num1%num2;

return res;

}

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.

//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>

int ch();

int even\_odd();

float basic\_s();

void main(){

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

int choice=ch();

if(choice==1){

int res=even\_odd();

if(res=0)

printf("even number");

else

printf("odd number");

}else{

if(choice==2){

float res=basic\_s();

printf("total salary is %f",res);

}

else{

printf("\nInvalid inputs");

}

}

}

//function defination

int ch(){

int choice;

printf("\nEnter the choice:");

scanf("%d",&choice);

return choice;

}

int even\_odd(){

int num;

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

scanf("%d",&num);

if(num%2==0)

{

return 1;

}

else{

return 0;

}

}

float basic\_s()

{

float basic\_s,total;

float da,ta,hra;

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;

return total;

}

5. 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

//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>

float billing();

void main(){

float res=billing();

if(res==0){

printf("No discount");

}else{

if(res==-1){

printf("Invalid input");

}else{

printf("The total bill is %f",res);

}

}

}

float billing(){

float bill,dis;

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

int user;

printf("\nEnter the user num:");

scanf("%d",&user);

if(user==1){

printf("\nEnter the bill:");

scanf("%f",&bill);

float bill\_ini=bill;

if(bill>500){

dis=bill\*0.2;

bill=bill-dis;

return bill;

}

else{

dis=bill\*0.1;

bill=bill-dis;

return bill;

}

}else{

if(user==2){

printf("\nEnter the bill:");

scanf("%f",&bill);

float bill\_ini=bill;

if(bill>600){

dis=bill\*0.15;

bill=bill-dis;

return bill;

}

else{

return 0;//no discount

}

}

else{

return -1;//invalid input

}

}

}

Assignment 3

3. Calculate sum of numbers in the given range.

//sum of the number within given range

#include<stdio.h>

int sum\_range();//declaration

void main(){

int sum=sum\_range();//call;

printf("Sum is %d",sum);

}

int sum\_range(){

int start=5,end=10;

int sum=0;

int i=start;

while(i<=end){

sum=sum+i;

i++;

}

return sum;

}

1. Check number is prime or not.

//prime number

#include<stdio.h>

int prime();//declaration

void main(){

int res=prime();//call

if(res!=-1){

printf("%d is prime",res);

}

else{

printf("no is not prime");

}

}

//defination

int prime(){

int num=5;

int i=2;

while(i<num){

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

return num;

}

else{

return -1;

}

}

5. Check number is armstro//armstrong number

#include<stdio.h>

int arm();

void main(){

int res=arm();

if(res)

printf("armstrong");

else

printf("not armstrong");

}

int arm(){

int num=153,sum\_cube=0,rem;

int O\_num=num;

while(num>0){

rem=num%10;//3//5//1

//printf("%d rem",rem);

num=num/10;//15//1//0

//printf("%d num",num);

sum\_cube=sum\_cube+(rem\*rem\*rem);//0+27//27+125=152//152+1//153

//printf("%d sum\_cube",sum\_cube);

}

if(sum\_cube==O\_num){

return 1;

}

else{

return 0;

}

}ng or not?

6.Check number is perfect or not.

//perfect number

#include<stdio.h>

int perfect();//declaration

void main(){

int res=perfect();//call

if(res!=-1){

printf("%d is perfect",res);

}

else{

printf("not perfect");

}

}

//function defination

int perfect(){

int num=6,sum\_F=0;

for(int i=1;i<num;i++){

if(num%i==0){

sum\_F=sum\_F+i;//adding factors here

}

}

// check it is perfect number or not

if(num==sum\_F){

return num;

}

else{

return -1;

}

}

7.Find factorial of number.

//factorial number

#include<stdio.h>

int fact();//declaration

void main(){

int fct=fact();//call

printf("The factorial is %d",fct);

}

//defination

int fact(){

int num=5,fact=1;

int i=num;

while(i>0){

fact=fact\*i;

//printf("\n fact is %d and i is %d",fact,i);

i--;

}

return fact;

}

8. Check number is strong or not.

//strong number

#include<stdio.h>

//declaration

int strong();

void main(){

int res=strong();//call

if(res){

printf("It is strong number");

}

else{

printf("It is not strong number");

}

}

int strong(){

int num=145;

int num\_O=num,rem,sum\_fact=0;

while(num>0){

rem=num%10;

num=num/10;//inc /dec

//for factorial

int fact=1;//for each iteration it must be 1 initialy

while(rem>0){

fact=fact\*rem;

rem--;

}

sum\_fact=sum\_fact+fact;

}

//check the sum of fact of each digit

if(num\_O==sum\_fact){

return 1;

}

else{

return 0;

}

//printf("after returns");

}

9. Check the given number is palindrome or not?

//palindrom num -->num==reverse of that num

#include<stdio.h>

int palindrome();//declaration

void main(){

int res=palindrome();//call

if(res!=-1)

printf(" %d Number is Palindrome ",res);

else

printf("not palindrome");

}

//function defination

int palindrome(){

int num=121;

int num\_O=num,rev=0;

// seperate the digits

int rem=0;

while(num>0){

rem=num%10;

num=num/10;

rev=rev\*10+rem;

}

if(rev==num\_O){

return num\_O;

}

else{

return -1;

}

}

10.Add the (first and last) digit of a given number

//sum of first and last digit of the number

#include<stdio.h>

int first\_ls();//declaration

void main(){

int res=first\_ls();//call

printf("The sum is %d",res);

}

int first\_ls(){

int num=143;

int O\_num=num;

int last\_digit,first\_digit,rem,sum=0;

last\_digit=num%10;

//printf("\nlast %d",last\_digit);

while(num>0){

rem=num%10;

num=num/10;

}

first\_digit=rem;

//printf("\nfirst %d",first\_digit);

sum=first\_digit+last\_digit;

return sum;

}

////////////////////////////////////////////////////////

**Type3**

Assignment1

1. Finding F from C (temp).

#include<stdio.h>

void f(float);

void main(){

float C=12.3;

f(C);

}

void f(float c){

float F;

F=(c\*9/5)+32;

printf(" c is %f and its F is %f",c,F);

}

1. Finding area and perimeter of rectangle or circle.

//find area of rectangle and circle

#include<stdio.h>

void circle\_area(float);

void rec\_area(float,float);

void rec\_perimeter(float,float);

void cir\_perimeter(float);

void main(){

float length=12.3,breadth=10;

float radius=3.5;

circle\_area(radius);//call

rec\_area(length,breadth);

rec\_perimeter(length,breadth);

cir\_perimeter(radius);

}

//function defination

void circle\_area(float radius){

float pie=3.14;

float area\_C=pie\*radius\*radius;

printf("\narea of circle is %f",area\_C);

}

void rec\_area(float length,float breadth){

float area\_R=length\*breadth;

printf("\narea of rectangle is %f",area\_R);

}

void rec\_perimeter(float length,float breadth){

float perimeter\_R=2\*(length+breadth);

printf("\nperimeter of rectangle is %f",perimeter\_R);

}

void cir\_perimeter(float radius){

float pie=3.14;

float perimeter\_C=2\*pie\*radius;

printf("\nperimeter of circle is %f",perimeter\_C);

}

1. Accept a 3 digit number from user and find the sum of the digits and also reverse the number

//accept 3 digit num ,sum the digits and reverse

#include<stdio.h>

void sum\_D(int);

void rev\_D(num);

void main(){

int num=11;

sum\_D(num);

rev\_D(num);

}

//functions definations

void sum\_D(int num){

int sum=0,rem;

while(num>0){

rem=num%10;

num=num/10;

sum=sum+rem;

}

printf("\nThe sum of the digit is %d ",sum);

}

void rev\_D(int num){

int rev=0,rem;

while(num>0){

rem=num%10;

num=num/10;

rev=(rev\*10)+rem;

}

printf("\nThe reverse of the number is %d",rev);

}

1. Check if the given number is even or odd.

//check even and odd

#include<stdio.h>

void even\_odd(int);//declaration

void main(){

int num;

printf("Enter the num:");

scanf("%d",&num);

even\_odd(num);//call

}

//func defination

void even\_odd(int num){

if(num%2==0){

printf("Even number");

}

else

{

printf("odd number");

}

}

1. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.

//total salary

void salary(float);

#include<stdio.h>

void main(){

float basic=3000;

salary(basic);

}

//function defination

void salary(float basic){

float total;

float da,ta,hra,a;

if(basic<=5000){

//printf("a is %f",a=10/100);// 10/100 it is internally is a int so int /int gives int therfore it gives o

//da=basic\*(10/100); eihter make any one float or convert into 0.1

da=basic\*0.1;

printf("\nda is %f",da);

ta=basic\*0.2;

printf("\nta is %f",ta);

hra=basic\*0.25;

printf("\nhra is %f",hra);

}

else{

da=basic\*(15/100);

ta=basic\*(20/100);

hra=basic\*(25/100);

}

total=basic+da+ta+hra;

printf("\nThe total salary is %f",total);

}

6. Write a program to check if person is eligible to marry or not (male age >=21 and female age>=18

//eligible for marriage

#include<stdio.h>

void eligibility(char);

void main(){

char gender;//input either 'F' or 'M'

printf("Enter the Gender:");

scanf("%c",&gender);

eligibility(gender);

}

void eligibility(char g){

int age;

if(g=='F'){

printf("Enter age:");

scanf("%d",&age);

if(age>=18){

printf("Female is eligible for Marriage");

}

else{

printf("female is not eligible");

}

}

else{

if(g=='M'){

printf("Enter age:");

scanf("%d",&age);

if(age>=21){

printf("Male is eligible for marriage");

}

else{

printf("Male is not eligible");

}

}

else{

printf("invaild input");

}

}

}

//////////////////////////////////

Assignment2

1. Find the price of item when discount is given (specify different discount based on price)

//using scanf()

//Find the price of item when discount is given (specify different discount based on price)

#include<stdio.h>

void discount(float);

void main(){

float price;

printf("Enter the price : ");

scanf("%f",&price);

discount(price);

}

void discount(float price){

float dis;

//take the price from user

float price\_Ini=price;

if(price>=5000 && price<=7000){

dis=price\*0.2;

price=price-dis;

}

else{

if(price>=3000&&price<5000){

dis=price\*0.15;

price=price-dis;

}

else{

if(price<3000){

dis=price\*0.05;

price=price-dis;

}

else{

printf("invalid inputs");

}

}

}

printf("the original price is RS %f and after getting dis is RS %f ",price\_Ini,price);

}

1. Write a program to find greatest of three numbers using nested if-else.

//using scanf()

//greatest no. among 3

#include<stdio.h>

void gret(int,int,int);

void main(){

int num1,num2,num3;

printf("Enter num1:");

scanf("%d",&num1);

printf("\nEnter num2:");

scanf("%d",&num2);

printf("\nEnter num3 :");

scanf("%d",&num3);

gret(num1,num2,num3);//call

}

void gret(int num1,int num2,int num3){

if(num1>num2){

if(num1>num3){

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

}

else{

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

}

}

else{

if(num2>num3){

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

}

else{

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

}

}

}

1. Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desiredoperations.

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

#include<stdio.h>

void add(int,int);

void sub(int,int);

void div(int,int);

void mul(int,int);

void mod(int,int);

void choice(char);

void main(){

char sign;

//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);

choice(sign);

}

//func definations

void choice(char sign){

if(sign=='+'){

int num1,num2;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

add(num1,num2);

}

else{

if(sign=='-'){

int num1,num2;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

sub(num1,num2);

}

else{

if (sign=='/'){

int num1,num2;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

div(num1,num2);

}

else{

if(sign=='\*'){

int num1,num2;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

mul(num1,num2);

}

else{

if(sign=='%'){

int num1,num2;

printf("Enter num1 :");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

mod(num1,num2);

}

else{

printf("Invalid Inputs");

}

}

}

}

}

}

void add(int num1,int num2){

int res=num1+num2;

printf("Addition is %d",res);

}

void sub(int num1,int num2){

int res=num1-num2;

printf("substraction is %d",res);

}

void div(int num1,int num2){

int res=num1/num2;

printf("division is %d",res);

}

void mul(int num1,int num2){

int res=num1\*num2;

printf("multiplication is %d",res);

}

void mod(int num1,int num2){

int res=num1%num2;

printf("modulation is %d",res);

}

//using scanf

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

#include<stdio.h>

void opt(int);

void add(int,int);

void sub(int,int);

void mul(int,int);

void div(int,int);

void mod(int,int);

void main(){

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

int choice;

printf("Enter choice:");

scanf("%d",&choice);

opt(choice);

}

//function defination

void opt(int choice){

if(choice==1){

int num1,num2;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2:");

scanf("%d",&num2);

add(num1,num2);

}else{

if(choice==2){

int num1,num2;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2:");

scanf("%d",&num2);

sub(num1,num2);

}

else{

if(choice==3){

int num1,num2;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2:");

scanf("%d",&num2);

mul(num1,num2);

}

else{

if(choice==4){

int num1,num2;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2:");

scanf("%d",&num2);

div(num1,num2);

}else{

if(choice==5){

int num1,num2;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2:");

scanf("%d",&num2);

mod(num1,num2);

}

else{

printf("\nInvalid Inputs");

}

}

}

}

}

}

void add(int num1,int num2){

int res=num1+num2;

printf("Addition is %d",res);

}

void sub(int num1,int num2){

int res=num1-num2;

printf("substraction is %d",res);

}

void mul(int num1,int num2){

int res=num1\*num2;

printf("multiplication is %d",res);

}

void div(int num1,int num2){

int res=num1/num2;

printf("Division is %d",res);

}

void mod(int num1,int num2){

int res=num1%num2;

printf(" mod is %d",res);

}

1. 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.

//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 even\_Odd(int);

void salary(float);

void menu(int);

void main(){

int choice=2;

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

printf("\nEnter the choice:");

scanf("%d",&choice);

menu(choice);

}

//function definations

void menu(int choice){

if(choice==1){

int num;

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

scanf("%d",&num);

even\_Odd(num);

}else{

if(choice==2){

float basic\_s;

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

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

salary(basic\_s);

}else{

printf("choice is invalid");

}

}

}

void even\_Odd(int num){

if(num%2==0)

{

printf("\neven number");

}

else{

printf("\nodd number");

}

}

void salary(float basic\_s){

float da,ta,hra,total;

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);

}

1. 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

//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 billing(int);

void main(){

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

int user;

printf("\nEnter the user num:");

scanf("%d",&user);

billing(user);

}

//defination

void billing(int user){

float bill,dis;

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\n");

}

}

else{

printf("invalid inputs\n");

}

}

printf("bill is %f",bill);

}

Assignment3

1. Print numbes from 1 to 10.

//print table

#include<stdio.h>

void table(int);//declaration

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

//func call

table(num);

}

//defination

void table(int num){

int a;

int i=0;

while(i<10){

a=++i;

printf("%d \* %d = %d \n",num,a,num\*a);

}

}

1. Print table for the given number.

//print table

#include<stdio.h>

void table(int);//declaration

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

//func call

table(num);

}

//defination

void table(int num){

int a;

int i=0;

while(i<10){

a=++i;

printf("%d \* %d = %d \n",num,a,num\*a);

}

}

1. Calculate sum of numbers in the given range.

//sum of the number within given range

#include<stdio.h>

void sum\_range(int,int);//declaration

void main(){

int s=5,e=10;

sum\_range(s,e);//call;

printf("Sum is %d",sum);

}

void sum\_range(int start,int end){

int sum=0;

int i=start;

while(i<=end){

sum=sum+i;

i++;

}

return sum;

}

1. Check number is prime or not.

//prime number

#include<stdio.h>

void prime(int);

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

//call

prime(num);

}

void prime(int num){

int i=2;

while(i<num){

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

printf("Number is prime");

}

else{

printf("number is not prime");

}

}

1. Check number is armstrong or not?

//armstrong by count of digits//4 digit 1634 3digit 153

#include<stdio.h>

#include<math.h>

void arms(int);

void main(){

int num;

printf("Enter the num:");

scanf("%d",&num);

arms(num);

}

void arms(int num){

int rem;

int num\_O=num;

int num\_2=num;

int sum\_P=0;

int count=0;

while(num>0){

num=num/10;

count++;

}

while(num\_2>0){

rem=num\_2%10;

num\_2=num\_2/10;//dec

//pow(base,power)

//power=pow(rem,count);

//by using loop // to calculate the power as per count

int power=1;

int cnt=count;

while(cnt!=0){

power=power\*rem;

cnt--;

}

sum\_P=sum\_P+power;

}

if(num\_O==sum\_P)

{

printf("%d is armstrong number",num\_O);

}

else{

printf("%d is not an armstrong number",num\_O);

}

}

6. Check number is perfect or not.

//perfect number

#include<stdio.h>

void perfect(int);//declaration

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

perfect(num);//calling

}

//defination

void perfect(int num){

int sum\_F=0;

for(int i=1;i<num;i++){

if(num%i==0){

sum\_F=sum\_F+i;//adding factors here

}

}

// check it is perfect number or not

if(num==sum\_F){

printf("It is a perfect number %d",num);

}

else{

printf("It is not a perfect number %d",num);

}

}

7Find factorial of number.

//factorial number

#include<stdio.h>

void fac(int);

//declaration

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

fac(num);

}

//defination

void fac(int num){

int fact=1;

int i=num;

while(i>0){

fact=fact\*i;

//printf("\n fact is %d and i is %d",fact,i);

i--;

}

printf("\n factorial of %d is %d",num,fact);

}

8.Check number is strong or not.

//strong number

#include<stdio.h>

//declaration

void strong(int);

void main(){

int num;

printf("Enter the number:");

scanf("%d",&num);

strong(num);

}

//defination

void strong(int num){

int num\_O=num,rem,sum\_fact=0;

while(num>0){

rem=num%10;

num=num/10;//inc /dec

//for factorial

int fact=1;//for each iteration it must be 1 initialy

while(rem>0){

fact=fact\*rem;

rem--;

}

sum\_fact=sum\_fact+fact;

}

//check the sum of fact of each digit

if(num\_O==sum\_fact){

printf("It is strong number");

}

else{

printf("It is not strong number");

}

}

9Check the given number is palindrome or not?

//palindrom num -->num==reverse of that num

#include<stdio.h>

//declaration

void palindrome(int);

void main(){

int num;

printf("Enter the number :");

scanf("%d",&num);

//call

palindrome(num);

}

//defination

void palindrome(int num){

int num\_O=num,rev=0;

// seperate the digits

int rem=0;

while(num>0){

rem=num%10;

num=num/10;

rev=rev\*10+rem;

}

if(rev==num\_O){

printf("The number is palindrom %d",num\_O);

}

else{

printf("The number is not palindrom %d ",num\_O);

}

}

10.Add the (first and last) digit of a given number

//sum of first and last digit of the number

#include<stdio.h>

void f\_L(int);//declaration

void main(){

int num;

printf("Enter the number :");

scanf("%d",&num);

f\_L(num);//calling

}

//defination

void f\_L(int num){

int O\_num=num;

int last\_digit,first\_digit,rem,sum=0;

last\_digit=num%10;

printf("\nlast %d",last\_digit);

while(num>0){

rem=num%10;

num=num/10;

}

first\_digit=rem;

printf("\nfirst %d",first\_digit);

sum=first\_digit+last\_digit;

printf("\nThe sum of last and first digit of the num %d is %d",O\_num,sum);

}

//////////////////////////assignment4

1. Print armstrong number in the the given range 1 to n?

//print the armstrong number in the given range

#include<stdio.h>

void armstrong(int);

void main(){

int end;

printf("enter the end of the range");

scanf("%d",&end);

armstrong(end);

}

void armstrong(int end){

//1,2,3,4,5..............100

int k,rem;

printf("armstrong numbers are : ");

/\*

for(k=1;k<=end;k++){

//now check the each k is armstrong or not

int num=k;//assign k to num bcz num is going to be modify

int sum=0;//we want sum=0 for everytime when we start to check

while(num>0){

rem=num%num;

num=num/10;

sum=sum+(rem\*rem\*rem);

}

if(k==sum){

printf("%d\t",k);

}

}

\*/

for(k=1;k<=end;k++){

int num=k;

int num\_2=k;

//int num=num\_2=k; k==>num\_2 and num\_2==>num

int count=0;

int sum=0;

//to check the count

while(num>0){

num=num/10;

count++;

}

//sum of the power

while(num\_2>0){

rem=num\_2%10;

num\_2=num\_2/10;

//calculate the power

int power=1;

int cnt=count;

while(cnt!=0){

power=power\*rem;

cnt--;

}

sum=sum+power;

}

//check that number is equal to that sum of the power or not ?

if(sum==k){

printf(" %d\t",k);

}

}

}

1. Print prime number in the given range 1 to n?

//range prime

#include<stdio.h>

void prime(int);

void main(){

int end;

printf("enter the end of the range :");

scanf("%d",&end);

prime(end);//call

}

//defination

void prime(int end){

int k;

for(k=1;k<=end;k++){

int num=k;

//check for each k the number is prime or not

int i=2;//start mod from 2 check up to 1 no before that number

while(i<num){

//check num is completely divisible or not

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

printf("%d\t",k);

}

}

}

1. check perfect number in the given range 1 to n?

//perfect number

#include<stdio.h>

void perfect(int);

void main(){

int end;

printf("Enter the end:");

scanf("%d",&end);

perfect(end);

}

void perfect(int end){

int k;

for(k=1;k<=end;k++){

int num=k;

int sum=0;

for(int i=1;i<num;i++){

if(num%i==0){

sum=sum+i;

}

}

if(k==sum){

printf("%d\n",k);

}

}

}

1. check strong number in the given range 1 to n?

//strong numbers

#include<stdio.h>

void stng(int);

void main(){

int end;

printf("Enter the end of the range:");

scanf("%d",&end);

stng(end);

}

void stng(int end){

int k,rem;

printf("strong numbers are: ");

for(k=1;k<=end;k++){

int num=k;

int sum\_F=0;

while(num>0){

rem=num%10;

num=num/10;

//calculate the fact of each digits

int fact=1;

while(rem>0){

fact=fact\*rem;

rem--;

}

//sum of the fact of each digits

sum\_F=sum\_F+fact;

}

//equalate sum with original number

if(k==sum\_F){

printf("%d\t",k);

}

}

}

1. Print fibonacci series?(optional)

//fibonacci series

#include<stdio.h>

void fibo(int,int);

void main(){

int prefib1=0;

int prefib2=0;

fibo(prefib1,prefib2);

}

void fibo(int prefib1,int prefib2){

int fib=0,end;

printf("Enter the range 0 to :");

scanf("%d",&end);

//solution to handle the infinity condition 1 1 1 1 -->(if)

if(prefib1==0 && prefib2==0){

fib=prefib2+prefib1;

printf("%d \t",fib);

prefib1++;

fib=prefib2+prefib1;

printf("%d\t",fib);

}

while(fib<=end)

{

prefib1=prefib2;

prefib2=fib;

fib=prefib2+prefib1;

if(fib<=end){

printf("%d\t",fib);

}

}

}

//////////////////////////////////

**Type4**

Assignment1

1. Finding F from C (temp).

//findind F from C (temp)

#include<stdio.h>

float F\_C(float);

void main(){

float C=12.3;

float feri=F\_C(C);

printf("F is %f",feri);

}

float F\_C(float C){

float F;

F=(C\*9/5)+32;

return F;

}

2. Finding area and perimeter of rectangle or circle.

//find area of rectangle and circle

#include<stdio.h>

float circle\_A(float);

float peri\_C(float);

float Rec\_A(float,float);

float Rec\_peri(float,float);

void main(){

float radius=5.2;

float area\_C=circle\_A(radius);

printf("\narea of circle is %f",area\_C);

float perimeter\_C=peri\_C(radius);

printf("\nperimeter of circle :%f",perimeter\_C);

float length=5;

float breadth=2;

float area\_R=Rec\_A(length,breadth);

printf("\nArea of rectangle:%f",area\_R);

float peri\_R=Rec\_peri(length,breadth);

printf("\nPerimeter of rectangle:%f",peri\_R);

}

float circle\_A(float radius){

float pie=3.14;

float area\_C=pie\*radius\*radius;

return area\_C;

}

float peri\_C(float radius){

float pie=3.14;

float perimeter\_C=2\*pie\*radius;

return perimeter\_C;

}

float Rec\_A(float length,float breadth){

float area=length\*breadth;

return area;

}

float Rec\_peri(float length,float breadth){

float peri=2\*(length+breadth);

return peri;

}

3. Accept a 3 digit number from user and find the sum of the digits and also reverse the number

//accept 3 digit num ,sum the digits and reverse

#include<stdio.h>

//declaration

int reverse(int num);

int sum(int num);

void main(){

int num=11,s,r;

s=sum(num);

printf("sum is %d",s);

r=reverse(num);

printf("rev is %d",r);

}

//defination

int sum(int num){

int s=0;

while(num>0){

int rem=num%10;

num=num/10;

s=s+rem;

}

return s;

}

int reverse(int num){

int rev=0;

while(num>0){

int rem=num%10;

num=num/10;

//printf("num:%d\n",num);

rev=(rev\*10)+rem;

//printf("rev:%d\n",rev);

}

return rev;

}

4. Check if the given number is even or odd.

//check even and odd

#include<stdio.h>

//declaration

int even\_odd(int);

void main(){

int num;

printf("Enter the num:");

scanf("%d",&num);

//call

int res=even\_odd(num);

if(res==1){

printf("even number");

}

else{

printf("Odd number");

}

}

//defination

int even\_odd(int num){

if(num%2==0){

return 1;

}

else

{

return 0;

}

}

5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.

//total salary

#include<stdio.h>

//declaration

float total\_sal(float);

void main(){

float basic=1400;

float bs=total\_sal(basic);

printf("\nThe total salary is %f",bs);

}

//defination

float total\_sal(float basic){

float total;

float da,ta,hra,a;

if(basic<=5000){

//printf("a is %f",a=10/100);// 10/100 it is internally is a int so int /int gives int therfore it gives o

//da=basic\*(10/100); eihter make any one float or convert into 0.1

da=basic\*0.1;

printf("\nda is %f",da);

ta=basic\*0.2;

printf("\nta is %f",ta);

hra=basic\*0.25;

printf("\nhra is %f",hra);

}

else{

da=basic\*(15/100);

ta=basic\*(20/100);

hra=basic\*(25/100);

}

total=basic+da+ta+hra;

return total;

}

6. Write a program to check if person is eligible to marry or not (male age >=21 and female age>=18

//function without parameters without returntype

//eligible for marriage

#include<stdio.h>

int eligible(char,int);

void main(){

int age;

char gender;

printf("Enter age:");

scanf("%d",&age);

printf("Enter gender:");

fflush(stdin);

scanf("%c",&gender);

int res=eligible(gender,age);//char

if(res==1){

printf("Eligible");

}

else{

if(res==0){

printf("not Eligible");

}else{

if(res== -1){

printf("invalid input");

}

}

}

}

//function

int eligible(char gender,int age){

if(gender=='F'){

if(age>=18){

return 1;

}

else{

return 0;

}

}

else{

if(gender=='M'){

if(age>=21){

return 1;

}

else{

return 0;

}

}

else{

return -1;

}

}

}

Assignment2

1. Find the price of item when discount is given (specify different discount based on price)

//using scanf()

//Find the price of item when discount is given (specify different discount based on price)

#include<stdio.h>

//declaration

float discount(float);

void main(){

float price,p;

//take the price from user

printf("Enter the price : ");

scanf("%f",&price);

//call

p=discount(price);

printf(" dis is RS %f ",p);

}

//defination

float discount(float price){

float dis;

float price\_Ini=price;

if(price>=5000 && price<=7000){

dis=price\*0.2;

price=price-dis;

}

else{

if(price>=3000&&price<5000){

dis=price\*0.15;

price=price-dis;

}

else{

if(price<3000){

dis=price\*0.05;

price=price-dis;

}

}

}

return price;

}

/\*

//heart func 24/7

1. impure

2.pure

3.supply

\*/

1. Write a program to find greatest of three numbers using nested if-else.

//using scanf()

//greatest no. among 3

#include<stdio.h>

//declaration

int greatest(int,int,int);

void main(){

int num1,num2,num3;

printf("Enter num1:");

scanf("%d",&num1);

printf("\nEnter num2:");

scanf("%d",&num2);

printf("\nEnter num3 :");

scanf("%d",&num3);

//call

int g=greatest(num1,num2,num3);

printf("Greatest no is %d",g);

}

//defination

int greatest(int num1,int num2,int num3){

if(num1>num2){

if(num1>num3){

return num1;

}

else{

return num2;

}

}

else{

if(num2>num3){

return num2;

}

else{

return num3;

}

}

}

1. Accept two numbers from user and an operator (+,-,/,\*,%) based on that perform the desired operations.

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

#include<stdio.h>

//declaration

int sum(int,int);

int sub(int,int);

int multi(int,int);

int mod(int,int);

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=sum(num1,num2);

printf("Addition is %d",res);

}

else{

if(sign=='-'){

res=sub(num1,num2);

printf("sub is %d",res);

}

else{

if (sign=='/'){

res=div(num1,num2);

printf("div is %d",res);

}

else{

if(sign=='\*'){

res=multi(num1,num2);

printf("multiplication is %d",res);

}

else{

if(sign=='%'){

int res=mod(num1,num2);

printf("mod is %d",res);

}

else{

printf("Invalid Inputs");

}

}

}

}

}

}

int sum(int num1,int num2){

int res=num1+num2;

return res;

}

int sub(int num1,int num2){

int res=num1-num2;

return res;

}

int multi(num1,num2){

int res=num1\*num2;

return res;

}

int mod(num1,num2){

int res=num1%num2;

return res;

}

int div(num1,num2){

int res=num1/num2;

return res;

}

//using scanf

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

#include<stdio.h>

//declaration

int add(int,int);

int sub(int,int);

int div(int,int);

int multi(int,int);

int mod(int,int);

void main(){

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

int choice;

printf("Enter choice:");

scanf("%d",&choice);

if(choice==1){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=add(num1,num2); //call

printf("addition is %d :",res);

}else{

if(choice==2){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=sub(num1,num2); //call

printf("substraction is %d :",res);

}

else{

if(choice==3){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=div(num1,num2); //call

printf("div is %d :",res);

}

else{

if(choice==4){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=multi(num1,num2); //call

printf("multiplication is %d :",res);

}else{

if(choice==5){

int num1,num2,res;

printf("Enter num1:");

scanf("%d",&num1);

printf("Enter num2 :");

scanf("%d",&num2);

res=mod(num1,num2); //call

printf("addition is %d :",res);

}

else{

printf("\nInvalid Inputs");

}

}

}

}

}

}

//defination

int add(int num1,int num2){

int res=num1+num2;

return res;

}

int sub(int num1,int num2){

int res=num1-num2;

return res;

}

int multi(int num1,int num2){

int res=num1\*num2;

return res;

}

int div(int num1,int num2){

int res=num1/num2;

return res;

}

int mod(int num1,int num2){

int res=num1%num2;

return res;

}

1. 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.
2. //using scanf
3. //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
4. #include<stdio.h>
5. //declaration
6. int even\_Odd(int);
7. float basic\_salary(float);
8. void main(){
10. int choice=2;
11. printf("1.even odd \n 2.basic\_salary");
13. printf("\nEnter the choice:");
14. scanf("%d",&choice);

17. if(choice==1){
19. int num,n;
20. printf("\nEnter the number to check even odd :");
21. scanf("%d",&num);
22. n=even\_Odd(num);
23. if(n==1)
24. printf("Even");
25. else
26. printf("odd");
28. }else{

31. if(choice==2){
32. float basic\_s,t;
33. printf("\nEnter the basic salary:");
34. scanf("%f",&basic\_s);
36. t=basic\_salary(basic\_s);
37. printf("Total salary is %f",t);
38. }
39. else{
40. printf("\nInvalid inputs");
41. }
42. }
43. }
44. //definations
45. int even\_Odd(int num){


49. if(num%2==0)
50. {
51. return 1;
52. }
53. else{
54. return 0;
55. }
56. }
57. float basic\_salary(float basic\_s){
59. float total;
60. float da,ta,hra;
62. if(basic\_s<=5000){
63. da=basic\_s\*0.1;
64. ta=basic\_s\*0.2;
65. hra=basic\_s\*0.25;
66. }
67. else{
68. da=basic\_s\*0.15;
69. ta=basic\_s\*0.20;
70. hra=basic\_s\*0.25;
71. }
73. total=basic\_s+da+ta+hra;
74. return total;
75. }

5.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

//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>

//declaration

float billing(float);

void main(){

float bill,d;

printf("\nEnter the bill:");

scanf("%f",&bill);

d=billing(bill);

printf("bill is %f",d);

}

float billing(float bill){

float dis;

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

int user;

printf("\nEnter the user num:");

scanf("%d",&user);

float bill\_ini=bill;

if(user==1){

if(bill>500){

dis=bill\*0.2;

bill=bill-dis;

return bill;

}

else{

dis=bill\*0.1;

bill=bill-dis;

return bill;

}

}else{

if(user==2){

if(bill>600){

dis=bill\*0.15;

bill=bill-dis;

return bill;

}

else{

printf("no discount");

}

}

else{

printf("invalid inputs");

}

}

}

Assignment3

1. Calculate sum of numbers in the given range.

//sum of the number within given range

#include<stdio.h>

int sum\_range(int,int);//declaration

void main(){

int s=5,e=10,r;

r=sum\_range(s,e);//call;

printf("Sum is %d",r);

}

int sum\_range(int start,int end){

int sum=0;

int i=start;

while(i<=end){

sum=sum+i;

i++;

}

return sum;

}

1. Check number is prime or not.

//func without parameter without returntype

//prime number

#include<stdio.h>

//declaration

int prime(int);

void main(){

int num,p;

printf("Enter the num :");

scanf("%d",&num);

p=prime(num);//call

if(p==1)

printf("prime number");

else

printf("not prime number");

}

//defination

int prime(int num){

int i=2;

while(i<num){

if(num%i!=0){

i++;

}

else{

break;

}

}

if(i==num){

return 1;

}

else{

return 0;

}

}

1. Check number is armstrong or not?

//armstrong by count of digits//4 digit 1634 3digit 153

#include<stdio.h>

#include<math.h>

//declaration

int armstrong(int);

void main(){

int num,a;

printf("Enter the num:");

scanf("%d",&num);

//call

a=armstrong(num);

if(a==1)

printf("armstrong");

else

printf("not armstrong");

}

//defination

int armstrong(int num){

int rem;

int num\_O=num;

int num\_2=num;

int sum\_P=0;

int count=0;

while(num>0){

num=num/10;

count++;

}

while(num\_2>0){

rem=num\_2%10;

num\_2=num\_2/10;//dec

//pow(base,power)

//power=pow(rem,count);

//by using loop // to calculate the power as per count

int power=1;

int cnt=count;

while(cnt!=0){

power=power\*rem;

//printf("power:%d ",power);

cnt--;

}

sum\_P=sum\_P+power;

}

printf("%d",num\_O);

if(num\_O==sum\_P)

{

printf("%d",sum\_P);

return 1;

}

else{

return 0;

}

}

1. Check number is perfect or not.

//func without parameters without returns

//perfect number

//declaration of the func

int perfect(int);

#include<stdio.h>

void main(){

int num,p;

printf("Enter the num:");

scanf("%d",&num);

p=perfect(num);

if(p==1)

printf("perfect number");

else

printf("not perfect number");

}

int perfect(int num){

int sum\_Fac=0;

for(int i=1;i<num;i++){

if(num%i==0){

sum\_Fac=sum\_Fac+i;//adding factors here

}

}

// check it is perfect number or not

if(num==sum\_Fac){

return 1;

}

else{

return 0;

}

}

1. Find factorial of number.

//factorial number

#include<stdio.h>

//declaration

int factorial(int);

void main(){

int num,f;

printf("Enter the num:");

scanf("%d",&num);

//call

f=factorial(num);

printf("factorial of %d is %d ",num,f);

}

//defination

int factorial(int num){

int fact=1;

int i=num;

while(i>0){

fact=fact\*i;

//printf("\n fact is %d and i is %d",fact,i);

i--;

}

return fact;

}

1. Check number is strong or not.

//strong numbers

#include<stdio.h>

void stng(int);

void main(){

int end;

printf("Enter the end of the range:");

scanf("%d",&end);

stng(end);

}

void stng(int end){

int k,rem;

printf("strong numbers are: ");

for(k=1;k<=end;k++){

int num=k;

int sum\_F=0;

while(num>0){

rem=num%10;

num=num/10;

//calculate the fact of each digits

int fact=1;

while(rem>0){

fact=fact\*rem;

rem--;

}

//sum of the fact of each digits

sum\_F=sum\_F+fact;

}

//equalate sum with original number

if(k==sum\_F){

printf("%d\t",k);

}

}

}

1. Check the given number is palindrome or not?

//palindrom num -->num==reverse of that num

//declaration

int palindrome(int);

#include<stdio.h>

void main(){

int num,p;

printf("Enter the num:");

scanf("%d",&num);

p=palindrome(num);//call

if(p==1)

printf("palindrome");

else

printf("not palindrome");

}

//defination

int palindrome(int num){

int num\_O=num,rev=0;

// seperate the digits

int rem=0;

while(num>0){

rem=num%10;

num=num/10;

rev=rev\*10+rem;

}

if(rev==num\_O){

return 1;

}

else{

return 0;

}

}

10.Add the (first and last) digit of a given number

#include<stdio.h>

int sum\_range(int,int);//declaration

void main(){

int s=5,e=10,r;

r=sum\_range(s,e);//call;

printf("Sum is %d",r);

}

int sum\_range(int start,int end){

int sum=0;

int i=start;

while(i<=end){

sum=sum+i;

i++;

}

return sum;

}

//////////////////////////////////////////////////////////////////////////////////