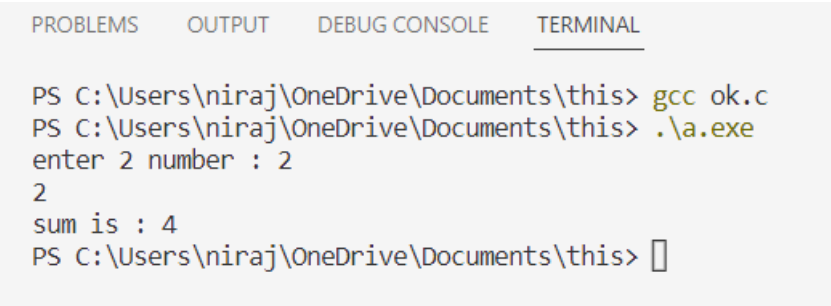
1)wap to find sum of 2 numbers.

Code:

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a,b,sum;
    printf(“enter a number”);
    scanf(“%d”,&a);
    printf(“enter a number”);
    scanf(“%d”,&b);
    sum = a+b;
    printf(“sum is : %d”,sum);
    getch();
}
```

output:

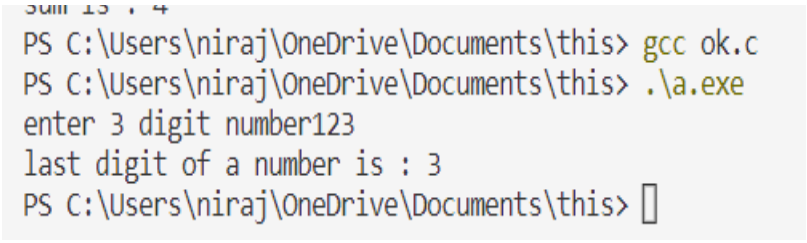


2) wap to input a number and display its last digit.

Code:

```
 #include<stdio.h>
#include<conio.h>
int main()
{

int a,c;
printf(“enter a number”);
scanf(“%d”,&a);
c=a%10;
printf(“last digit is : %d”,c);
getch();

}
```

output:

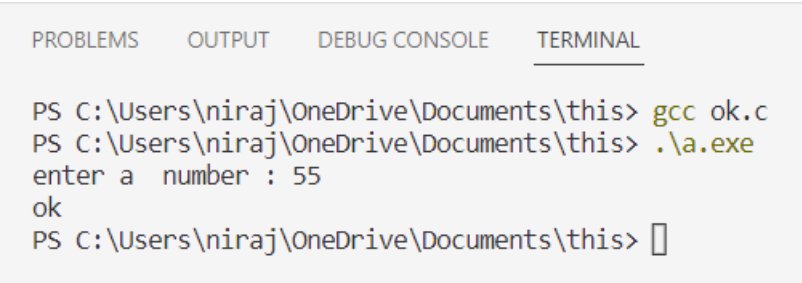


3) wap to input a number and display “ok” if divisible by 5.

code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int num;
printf(“enter a number”);
scanf(“%d”,&num);
if(num%5==0){
printf(“ok”);
}
else{
printf(“not ok”);
}
getch();
}
```

output:

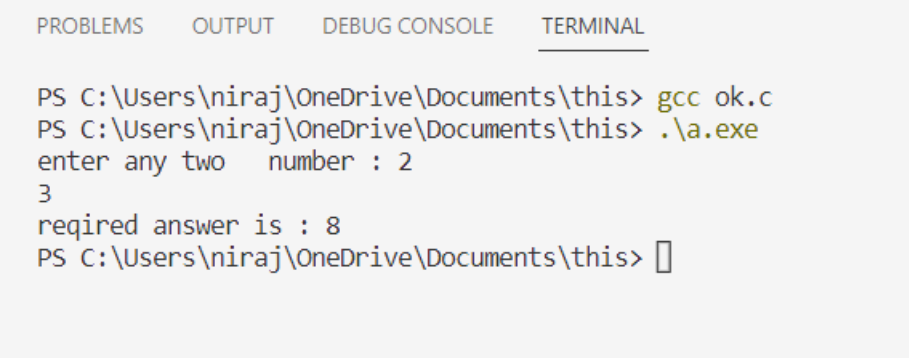


4)wap to input any two numbers and display their power(x,y)=x^y.

Code:

```
#include<stdio.h>
#inlcude<conio.h>
int main(){
int a,b;
printf(“enter any two number”);
scanf(“%d%d”,&a,&b);
int c= pow(a,b);
printf(“%d”,c);
getch();
}
```

output:

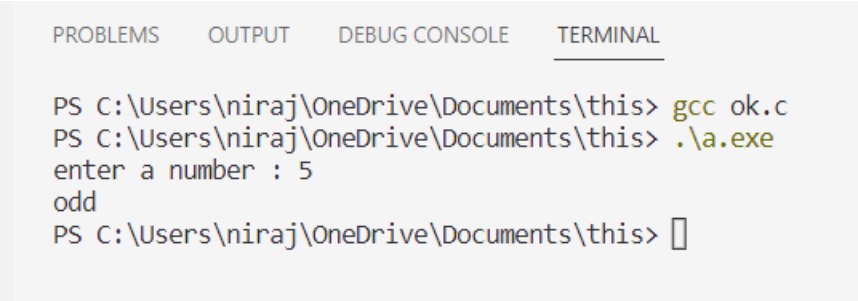


5)wap to input a number and find it is even or odd.

Code:

```
#include<stdio.h>
#include<conio.h>
int main()
{
int num;
printf(“enter a number”);
scanf(“%d”,&num);
num%2==0? printf(“even”) :printf(“odd”);
getch();
}
```

output:



6)wap to input 3 numbers and display the smallest one .

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int a,b,c;
pritntf(“enter any three number”);
scanf(“%d%d”,&a,&b);
if(a<b && a<c){
printf(“%d is smallest number is %d”,a);}
else if (b<a && b<c){
printf(“%d is smallest”,b);}
else{printf(“%d is smallest”,c);}
getch();
}
```

output:

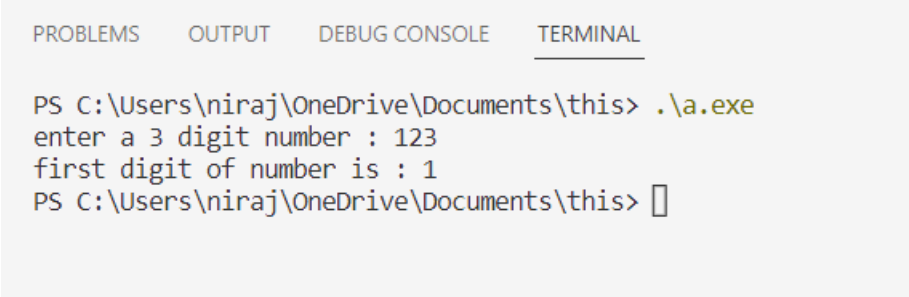
```
PS C:\Users\niraj\OneDrive\Documents\this> gcc ok.c
PS C:\Users\niraj\OneDrive\Documents\this> .\a.exe
enter 3 number : 2
3
4
smallest number is : 2
PS C:\Users\niraj\OneDrive\Documents\this>
```

7) wap to input 3 digit number and display its first number.

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int num;
printf(“enter a 3 digit number\t”);
scanf(“%d”,&num);
int c=num/100;
printf(“first number is %d”,c);
getch();
}
```

output:

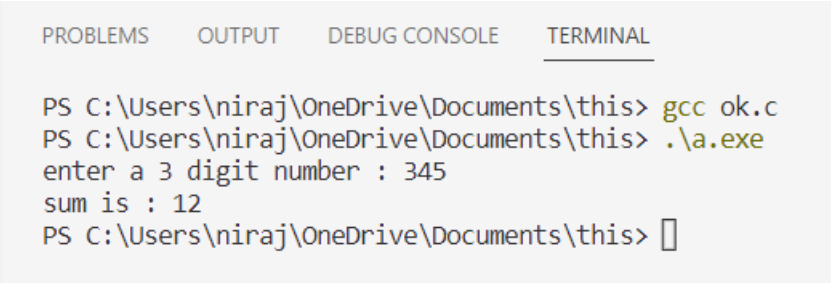


8)wap to input 3 digit number and display their sum.

Code:

```
#include<stdio.h>
#include<conio.h.
int main(){
int num;
printf(“enter a 3 digit number\t”);
scanf(“%d”,&num);
int num1=num/100;
int num2=num%10;
int num3= (num/10)%10;
int sum= num1+num2+num3;
printf(“sum is %d”,sum);
getch();
}
```

output:

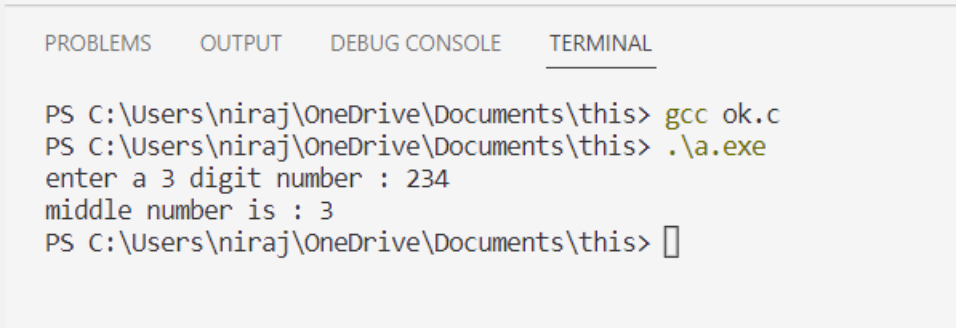


9)wap to input 3 digit number and display middle digit.

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int num;
printf(“enter a 3 digit number”);
scanf(“%d”,&num);
int midd=(num/10)%10;
printf(“middle digit is %d”,midd);
getch();
}
```

output:

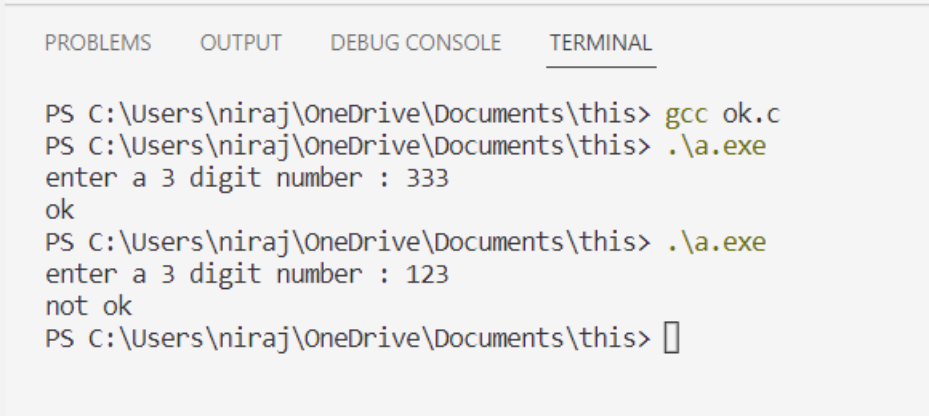


10) wap to input 3 digit number and display “ok” if all the digits are same else display “not ok”.

Code:

```
#include<stdio.h>
#include<conio.h>

int main(){
int num,num1,num2,num3;
printf(“enter a 3 digit number”);
scanf(“%d”,&num);
num1=num%10; num2=num/100; num3=(num/10)%10;
if(num1==num2 && num2==num3){
printf(“ok”);}
else {
printf(“not ok”);
getch();
}
```

output:

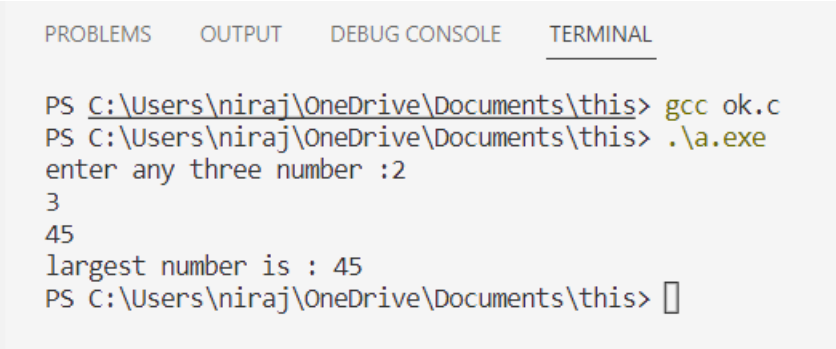


11)wap to input 3 numbers and display the largest number.

Code:

```
#include<stdio.h>
#include<conio.h.
int main(){
int a,b,c;
printf(“enter any three number”);
scanf(“%d%d%d”,&a,&b,&c);
if(a>b && a>c){
printf(“largest number is %d”,a);}
else if (b>a && b>c){
printf(“largest number is %d”,b);
else{
printf(“largest number is %d”,c);
getch();
}
```

output:



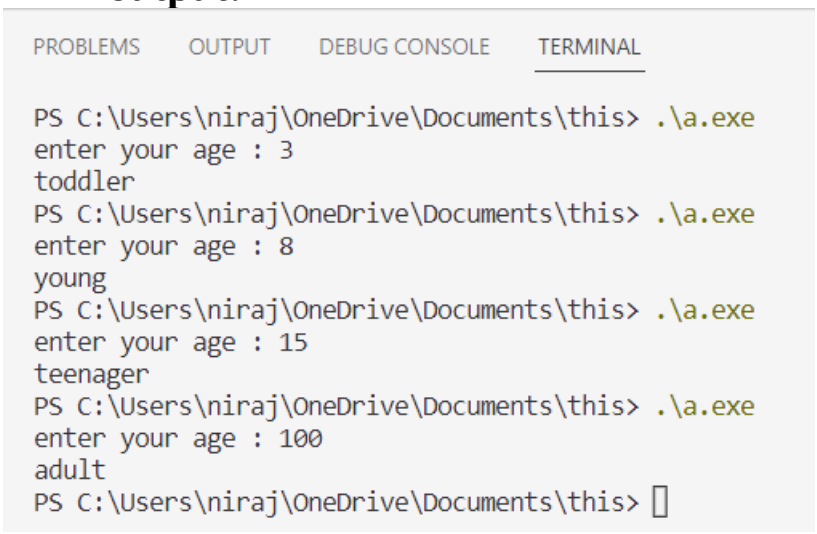
12)wap to input age of a person and display message accuracy to the following conditions.

AGE	MESSAGE
1-5	toddler
6-12	young
13-19	teenager
>19	adult

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int age;
printf(“enter your age\t”);
scanf(“%d”,&age);
if(age>=1&&age<==5){
printf(“toddler”);}
else if (age>=6 && age <=12{
printf(“young”);}
else if (age >=13 && age <=19){
printf(“teenager”);
else {
printf(“adult”);}
getch();
}
```

output:



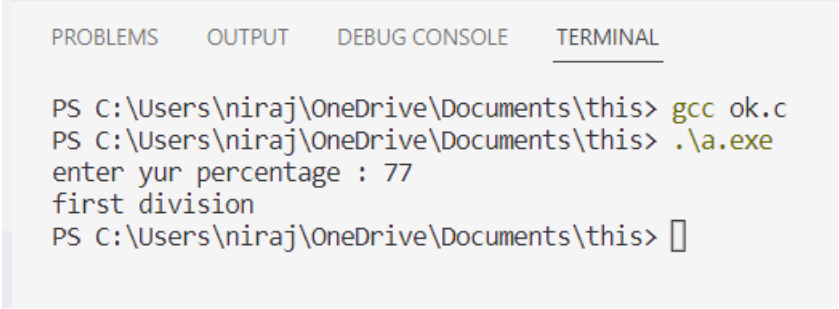
13) wap to input percentage mark and display their grade.

Percentage	Grade
>=80	Distinction
>=60 and <80	First div
>=50 and <60	Second div
>=40 and <50	Third div
<40	Failed

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int per;
printf(“enter percentage”);
scanf(“%d”,&per);
if (per>=80){
printf(“Distinction”);}
else if (per>=60 && per <80){
printf(“first div”);}
else if (per>50&&per<=60){
printf(“second div”);}
else if(per>=40&&per<50){
printf(“third div”);}
else {
printf(“failed”);
getch();
}
```

output:



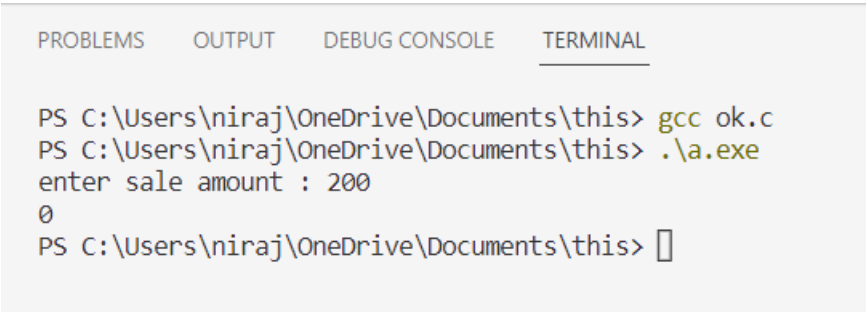
14)wap to input sale amount and display commission amount based on following data .

Sale amount	Commission
<1000	0%
>=1000 and <20000	10%
>=20000	15%

code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int amt,c;
printf(“enter sale amount \t”);
scanf(“%d”,&amt);
if(amt<1000){
printf(“%d”,0);}
else if (amt>=1000 && amt <20000){
c=amt*10/100;
printf(“commission amt is %d”,c);}
else {
c=amt*15/100;
printf(“commission amt is %d”,c);}
getch();
}
```

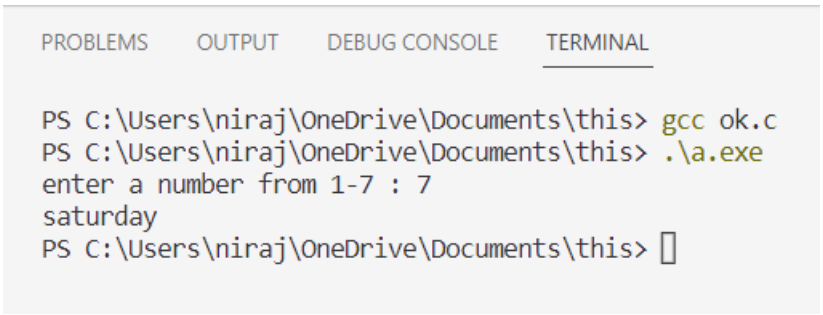
output:



15)wap to input a number and display day on following condition .(use switch).

```
#include<stdio.h>
#include<conio.h>
int main(){
int day;
printf("enter a number (1-7));
scanf("%d",&day);
switch(day){
case 1:
printf("sunday");
break;
case 2:
printf("monday");
break;
case 3
printf("tuesday");
break;
case 4:
printf("wednesday");
break;
case 5:
printf("thurday");
break;
case 6:
printf("friday");
break;
case 7:
printf("satuday");
break;
default:
printf("invalid");
break;
}
return 0;
}
```

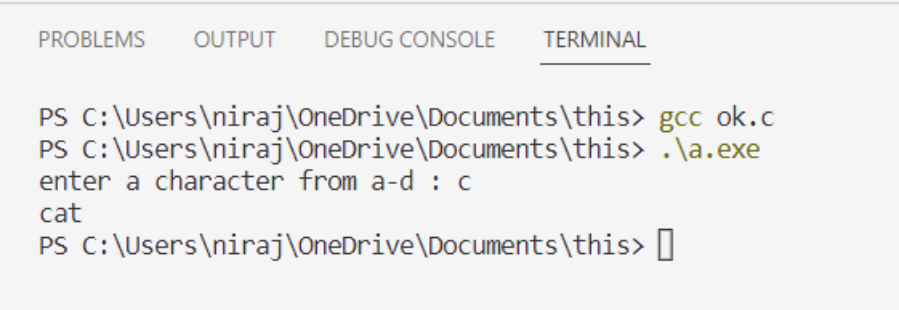
output:



16) wap to input a character and display word as mentioned below: [a=apple,b=ball,c=cat,d=dog]

```
#include<stdio.h>
#include<conio.h>
int main(){
char ch;
printf("enter a charcter  (a-d));
scanf("%c",&ch;
switch(ch){
case 'a':
printf("apple");
break;
case 'b':
printf("ball");
break;
case 'c'
printf("cat");
break;
case 'd':
printf("dog");
break;
default:
printf("invalid");
break;
}
return 0;
}
```

output:



17)MENU BASED PROGRAM:

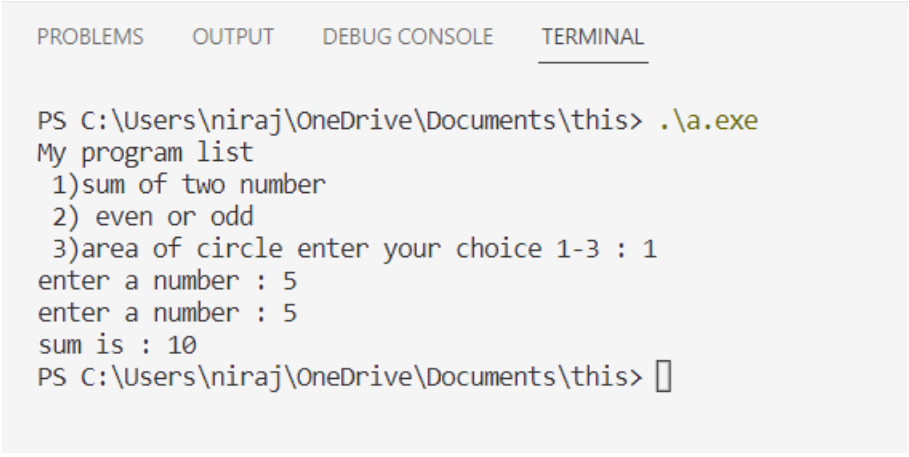
My program list
1)sum of 2 numbers.
2)even or odd
3)area of circle

enter your choice

```
#include<stdio.h>

int main()
{
int num,a,b,s;
float q;

printf("My program list");
printf("\n1)sum of 2 numbers");
printf("\n2)even of odd");
printf("\n3)area of circle");
printf("enter a number(1-3)");
scanf("%d",&num);

switch(num){
case 1:
printf("enter two numbers");
scanf("%d%d",&a,&b);
s=a+b;
printf("sum is %d",s);
break;

case 2:
printf("enter a number");
scanf("%d",&a);
if(a%2==0){
printf("even");}
else{
printf("odd");}
```

```
break;


case 3:
printf("enter radius");
scanf("%d",&a);
q=3.14*a*a;
printf("radius is %f",q);
break;

default:
printf("invalid");
break;
}
return 0;
}
```

output:

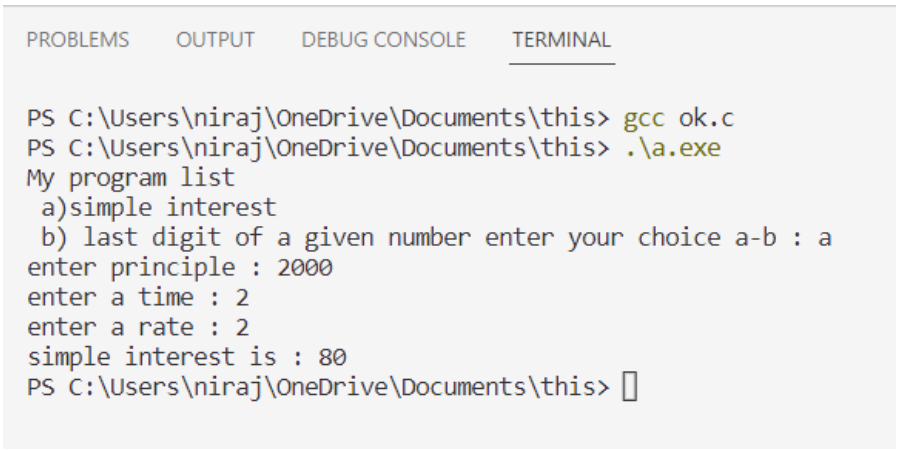


18)

Indreni college
a)simple interest
b)last digit of a given number
enter your choice

```
#include<stdio.h>
int main(){
char ch;
int p,t,r,si,num;
printf("Indreni college");
printf("\ta)Simple interest");
printf("\tb)last digit of given number");
printf("enter your choice (a or b)");
scanf("%c",ch);
switch(ch){
case 'a':
printf("enter principle");
scanf("%d",&p);
printf("enter time");
scanf("%d",&t);
printf("enter rate");
scanf("%d",&r);
si=p*t*r/100;
printf("simple interest is %d",si);
break;

case 'b':
printf("enter a number");
scamf("%d",&num);
p=num%10;
printf("last digit of a number
is%d",p);
break;
defaut:
printf("invalid");
break;
}
return 0;}
```

output:

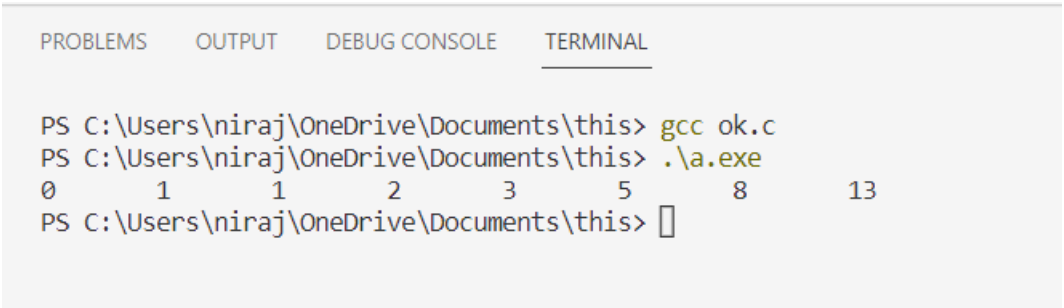


19)wap to print fibonacci series (0,1,1,2,3,5,8,13)

code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int n=0;
int n1=1;
printf("%d\t",n);
printf("%d\t",n1);
int i,c;
for(i=1;i<=6;i++){
c=n+n1;
n=n1;
n1=c;
printf("%d\t",c);
}
return 0;
}
```

output:

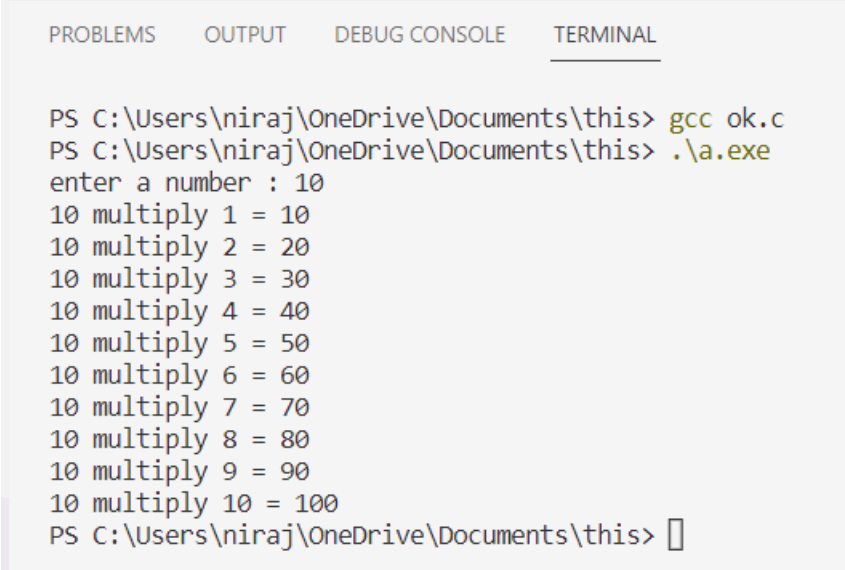


20)wap to print the multiplication table of given number .

Code:

```
#include<stdio.h>
#include<conio.h>
int main(){
int num;
printf("enter a number");
scanf("%d",&num);
int i;
for(i=1;i<=10;i++){
int c;
c=num*i;
printf("%d multiply %d= %d”,num,i,c);
}
return 0;
}
```

output:

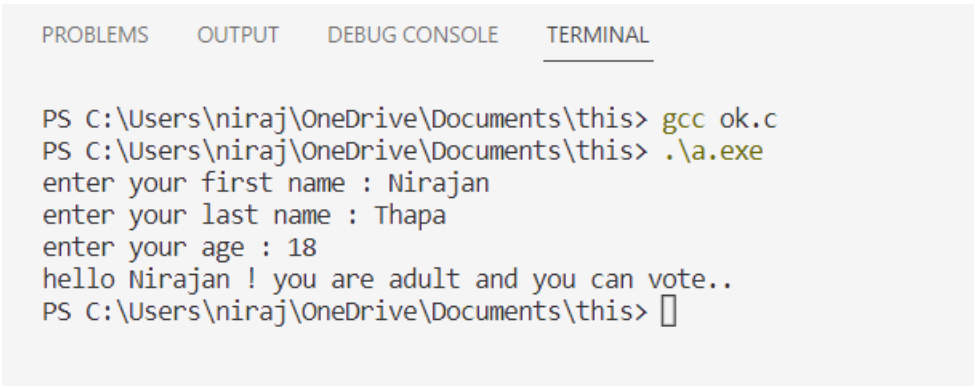


21)wap to input name roll number and age of user and print if they can vote or not (using array).

Code:

```
#include<stdio.h>
#include<conio.h>
int main{
char first_name[20];
char last_name[20];
int age,roll_number;
printf("enter first name");
scanf("%s",&first_name);
printf("enter last name");
scanf("%s",&last_name);
printf("enter roll number");
scanf("%d",&roll_number");
printf("enter age ");
scanf("%d",&age);
if(age<18){
printf("you are minor and you are not eligilbe to vote");
}
else{
printf("you are adult and you can vote );}
retun 0;
}
```

output:

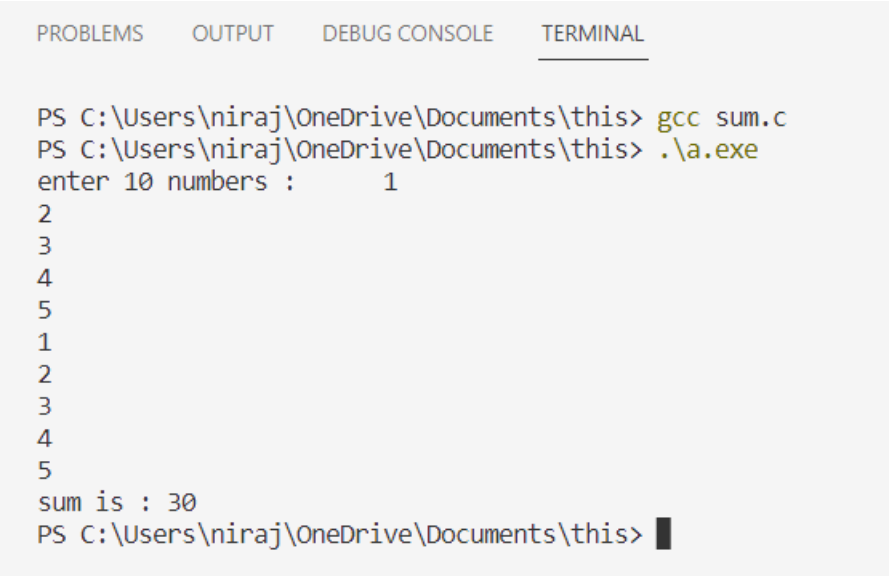


22)wap to input 10 numbers and find their sum.

Code:

```
#include<stdio.h>
int main(){
int num;
printf("enter 10 numbers: ");
int i,sum=0;
for(i=1;i<=10;i++){
scanf("%d",&num);
sum=sum+num;
}
printf("sum is : %d",sum);
return 0;
}
```

output:



23)wap to print the given series :
a)1,2,3,4,5,6,7,8,9,10,11……..,50.

Code:

```
#include<stdio.h>
int main(){
int i;
for(i=1;i<=100;i++){
printf(“%d”,i);
}
return 0;
}
```

output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\niraj\OneDrive\Documents\this> gcc hello.c
PS C:\Users\niraj\OneDrive\Documents\this> .\a.exe
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  2
1  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40  4
1  42  43  44  45  46  47  48  49  50
PS C:\Users\niraj\OneDrive\Documents\this>
```

b) 3,7,11,15,19…….,59.

code:

```
#include<stdio.h>
int main(){
int n=3;
while(n<=59){
printf(“%d”,n);
n=n+4;}
return 0;
}
```

output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\niraj\OneDrive\Documents\this> gcc h.c
PS C:\Users\niraj\OneDrive\Documents\this> .\a.exe
3  7  11  15  19  23  27  31  35  39  43  47  51  55  59
PS C:\Users\niraj\OneDrive\Documents\this>
```

c) 2,4,6,8,10…..24.

code:

```
#include<stdio.h>
int main(){
int n=2;
while(n<=24){
printf(“%d”,n);
n=n+2;
}
return 0;
}
```

output:

```
PS C:\Users\niraj\OneDrive\Documents\this> gcc sum.c
PS C:\Users\niraj\OneDrive\Documents\this> .\a.exe
2       4       6       8       10      12      14      16      18      20      22      24
PS C:\Users\niraj\OneDrive\Documents\this>
```

d) 1,4,9,16…...100.

code:

```
#include<stdio.h>
int i;
for(i=1;i<=10;i++){
printf(“%d”,i*i);
}
return 0;
}
```

output:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

PS C:\Users\niraj\OneDrive\Documents\this> gcc sum.c
PS C:\Users\niraj\OneDrive\Documents\this> .\a.exe
1
4
9
16
25
36
49
64
81
100
PS C:\Users\niraj\OneDrive\Documents\this>
```

24)wap to print the multiplication table for 1-4.

code:

```
#include<stdio.h>
int main(){
int i,j;
for(i=1;i<=10;i++){
for(j=1;j<=10;j++){
printf("%d multiply %d = %d",i,j,i*j);
}
}
return 0;
}
```

output:

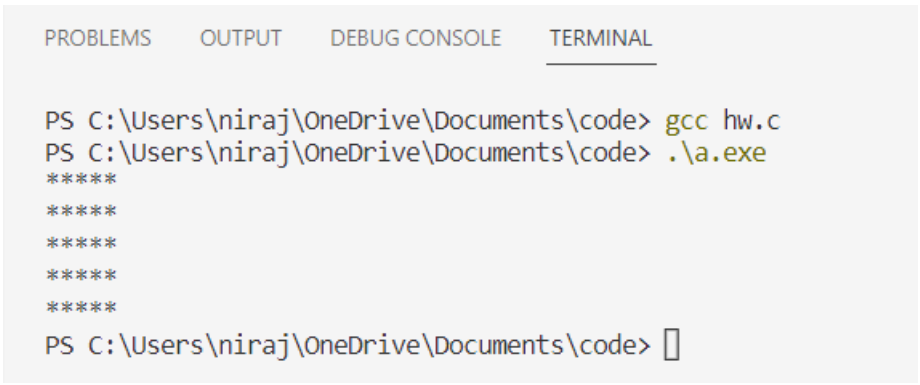
```
PS C:\Users\niraj\OneDrive\Documents\code> .\a.exe
1 multiply 1 = 1
1 multiply 2 = 2
1 multiply 3 = 3
1 multiply 4 = 4
1 multiply 5 = 5
1 multiply 6 = 6
1 multiply 7 = 7
1 multiply 8 = 8
1 multiply 9 = 9
1 multiply 10 = 10
2 multiply 1 = 2
2 multiply 2 = 4
2 multiply 3 = 6
2 multiply 4 = 8
2 multiply 5 = 10
2 multiply 6 = 12
2 multiply 7 = 14
2 multiply 8 = 16
2 multiply 9 = 18
2 multiply 10 = 20
3 multiply 1 = 3
3 multiply 2 = 6
3 multiply 3 = 9
3 multiply 4 = 12
3 multiply 5 = 15
3 multiply 6 = 18
3 multiply 7 = 21
3 multiply 8 = 24
3 multiply 9 = 27
3 multiply 10 = 30
4 multiply 1 = 4
4 multiply 2 = 8
4 multiply 3 = 12
4 multiply 4 = 16
4 multiply 5 = 20
4 multiply 6 = 24
4 multiply 7 = 28
4 multiply 8 = 32
4 multiply 9 = 36
4 multiply 10 = 40
```

25)wap to print patters:

a)

code:

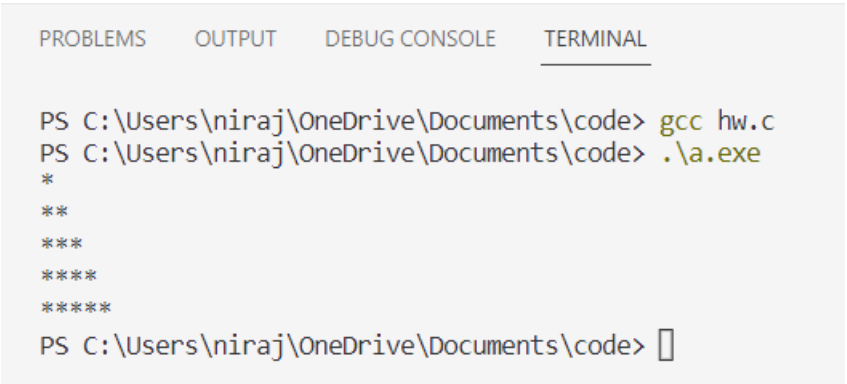
```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
  for(j=1;j<=5;j++)
    {
      printf("*");
    }
   printf("\n");
 }
return 0;
}
```



b)

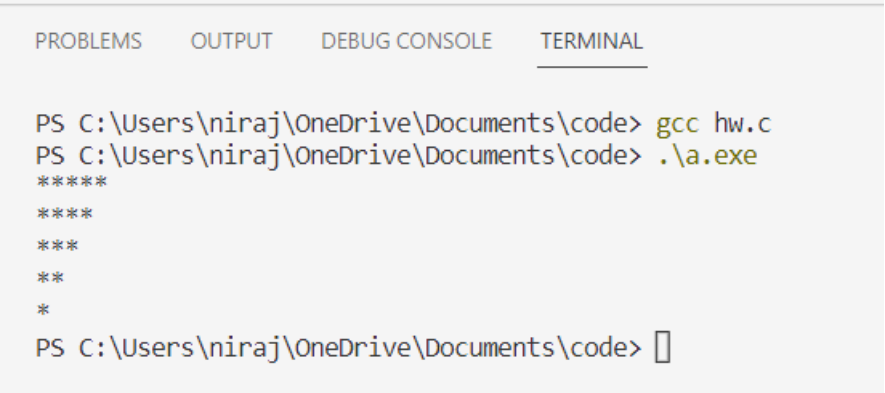
code:

```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
  for(j=1;j<=i;j++)
    {
      printf("*");
    }
   printf("\n");
 }
return 0;
}
```



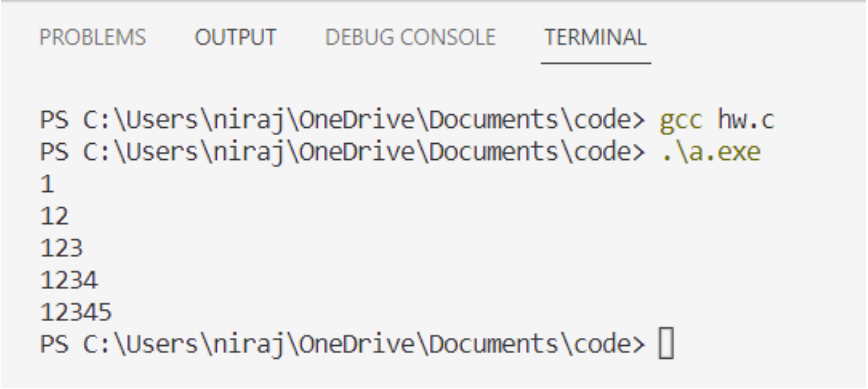
c)
code:

```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
  for(j=5;j>=i;j--)
    {
      printf("*");
    }
   printf("\n");
 }
return 0;
}
```



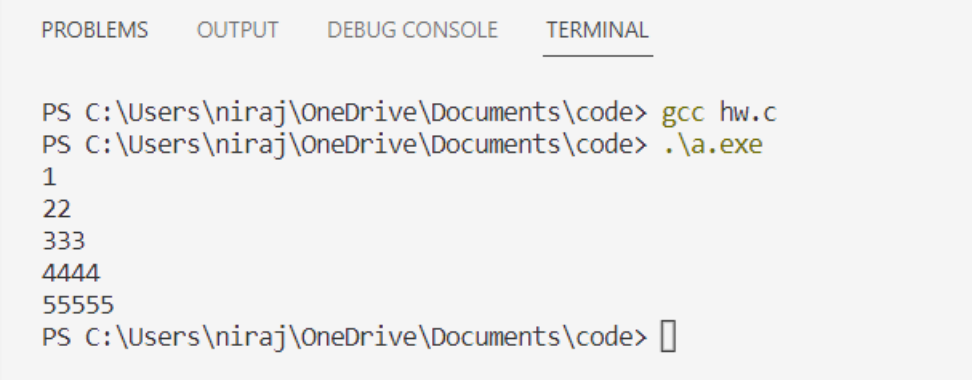
d)
code:

```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
  for(j=1;j<=i;j++)
    {
      printf("%d",j);
    }
   printf("\n");
 }
return 0;
}
```



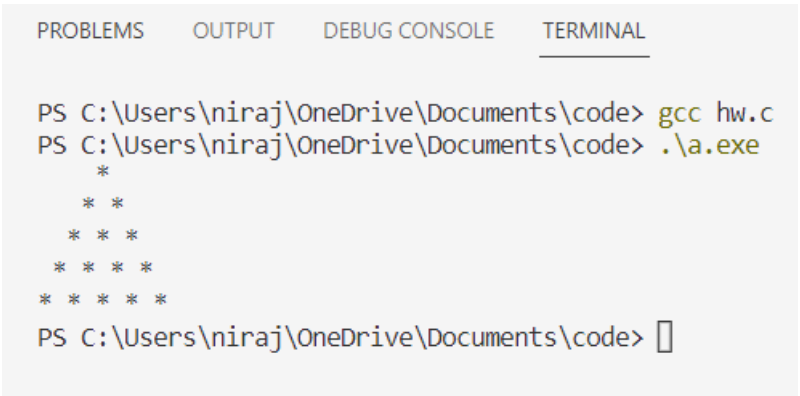
e)
code:

```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
  for(j=1;j<=i;j++)
    {
      printf("%d",i);
    }
   printf("\n");
 }
return 0;
}
```



f)
code:

```
#include<stdio.h>
int main(){
int i ,j;
for(i=1;i<=5;i++)
{
     for(s=4;s>=i;s--)
      {
        printf(" ");
      }
     for(j=1;j<=i;j++)
      {
        printf("* ");
      }
    printf("\n");
}
return 0;
}
```



Array:

-an array can hold similar data type
- they all have a common name
- each element is accessed via its index
- array are fixed sized ,i.e you cannot alter later.
- array size can be calculated = (data typesize * array size.)

example:

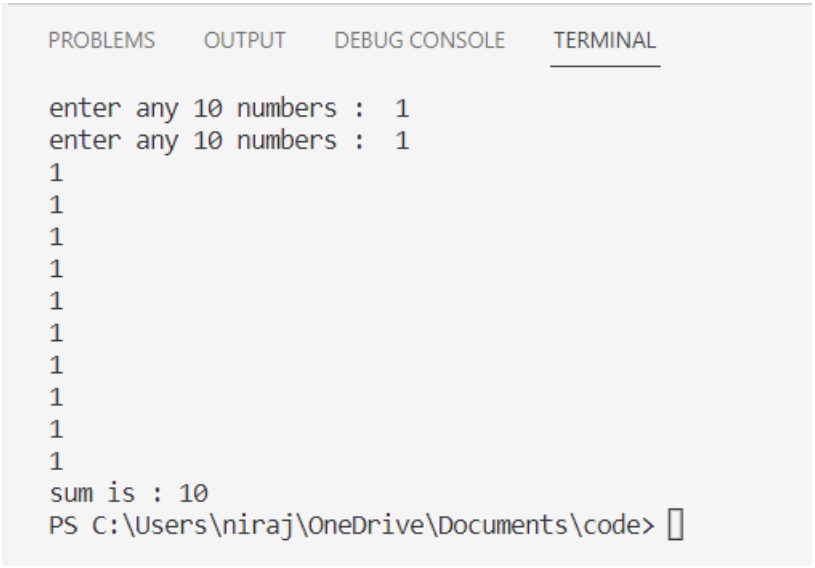
```
int a[10];
    a[0]=5;
    a[1]=10;

    a[9]=15;

int a[5]={1,6,7,3,4,5}
    printf("%d",a[3];
```

26)wap to input 10 numbers and display their sum (using array).

Code:

```
#include<stdio.h>
int main(){
    int n[10];
    int i,s=0;
    printf("enter any 10 numbers : \t");
    for(i=0;i<10;i++)
    {
        scanf("%d\t",&n[i]);
        s=s+n[i];

    }
    printf("sum is : %d",s);
    return 0;
}
```

output:

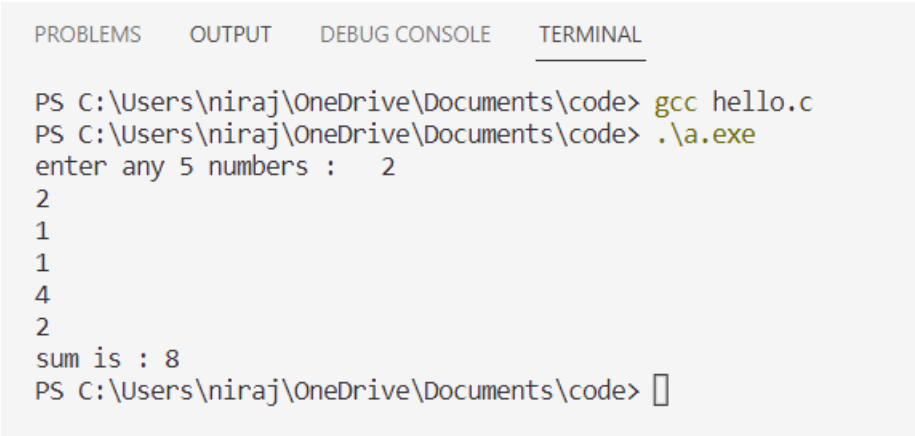


27)wap to input 5 numbers and find the sum of even number .

Code:

```
#include<stdio.h>
int main(){
    int n[5];
    int i,s=0;
    printf("enter any 5 numbers : \t");
    for(i=0;i<5;i++)
    {
        scanf("%d\t",&n[i]);
        if(n[i]%2==0)
        {
        s=s+n[i];
        }

    }
    printf("sum is : %d",s);
    return 0;
}
```

output:

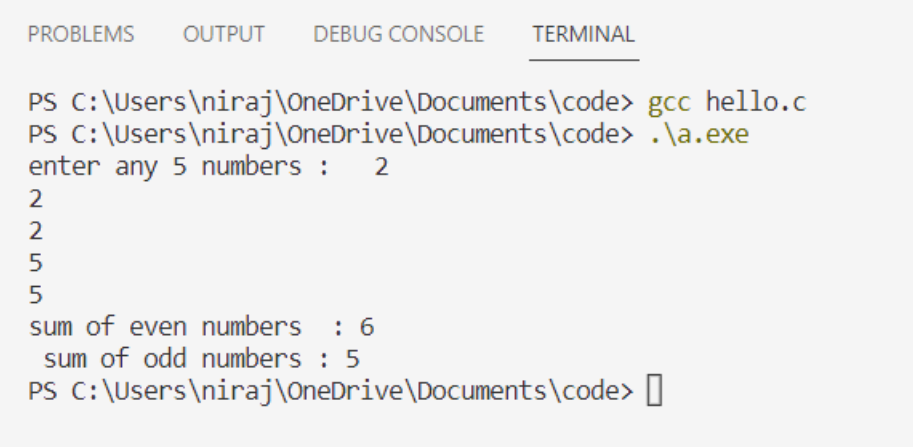


28)wap to input 5 numbers and find sum of even numbers and odd numbers .

Code:

```
#include<stdio.h>
int main(){
    int n[5];
    int i,se=0,so=0;
    printf("enter any 5 numbers : \t");
    for(i=0;i<4;i++)
    {
        scanf("%d\t",&n[i]);
        if(n[i]%2==0)
        {
        se=se+n[i];
        }
        else
        {
          so=so+n[i];
        }

    }
    printf("sum of even numbers  : %d",se);
    printf("\n sum of odd numbers : %d",so);
    return 0;
}
```

output:

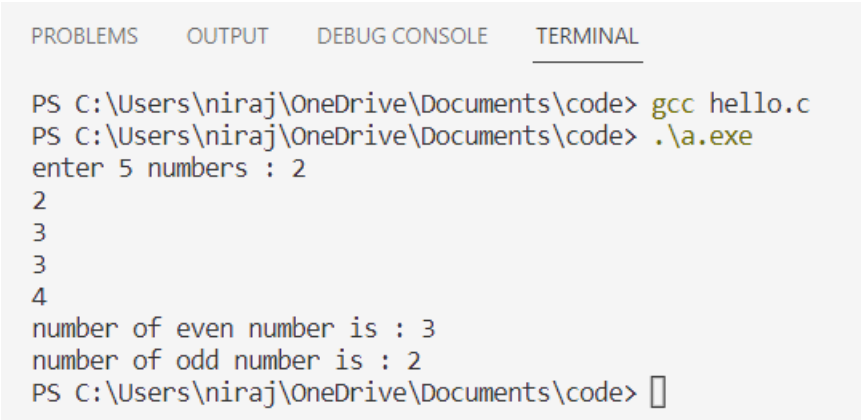


29)wap to input 5 numbers and count the number of even or odd.

Code:

```
#include<stdio.h>
int main(){
    int i;
    int n[5];
    int ce=0,co=0;
    printf("enter 5 numbers : ");
    for(i=0;i<5;i++)
    {
        scanf("%d",&n[i]);
        if(n[i]%2==0)
        {
            ce++;
        }
        else
        {
            co++;
        }

    }
    printf("number of even number is : %d\n",ce);
    printf("number of odd number is : %d",co);
    return 0;
}
```

output:

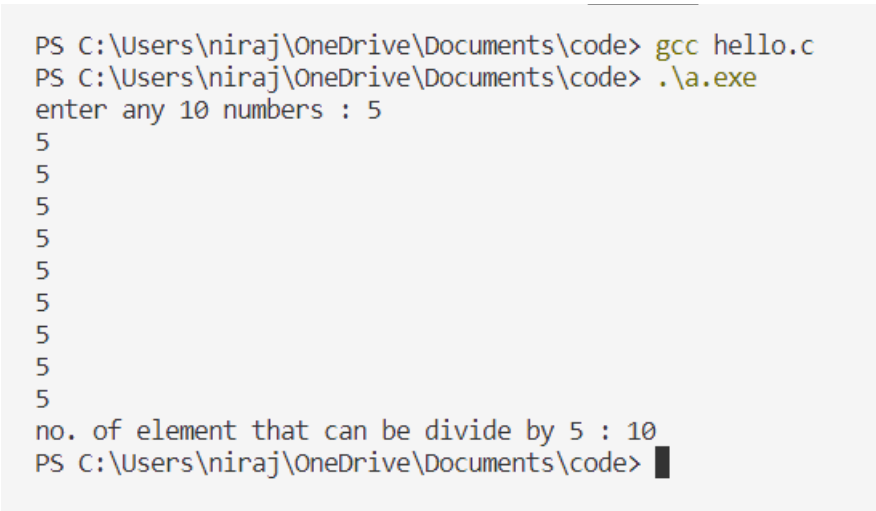


30) wap to input 5 number from user and display number of elements that can be divisible by 5.

code:

```
#include<stdio.h>
int main(){
    int n[10];
    int i,c=0;
    printf("enter any 5 numbers : ");
    for(i=0;i<10;i++)
    {
        scanf("%d",&n[i]);
        if(n[i]%5==0)
        {
            c++;
        }
    }
    printf("no. of element that can be divide by 5 : %d",c);
    return 0;
}
```

output:

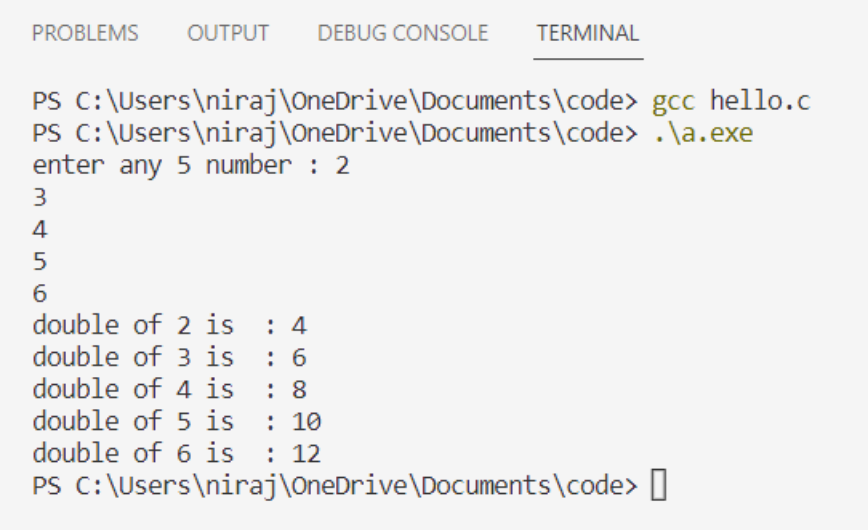


31)wap to input 5 numbers in array and increment the array by 2 times and display it .

Code:

```
#include<stdio.h>
int main(){
    int n[5];
    int n1[5];
    printf("enter any 5 number : ");
    int i;
    for(i=0;i<5;i++)
    {
        scanf("%d",&n[i]);

    }
    for(i=0;i<5;i++)
    {
         n1[i]=n[i]*2;
        printf("double of %d is  : %d\n",n[i],n1[i]);
    }
    return 0;
}
```

output:



32)wap to input 5 numbers and display only those numbers which end with last digit 6.

code:

```
#include<stdio.h>
int main(){
    int n[5];
    int i;
    printf("enter any 5 numbers : \n");
    for(i=0;i<5;i++)
    {
        scanf("%d",&n[i]);
    }
    for(i=0;i<5;i++)
    {
        int c=n[i]%10;
        if(c==6)
        {
            printf("the number whose last digit is 6 : %d\n",n[i]);
        }
    }

    return 0;
}
```

output: