C ASSIGNMNET

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B39

AREA AND CIRCUMFERENCE OF CIRCLE

```
#include <stdio.h>
int main()
{
    float area,pi,circ,r;
    pi= 3.14;
    printf("enter the radius of circle");
    scanf("%f", &r);
    area= pi*r*r;
    circ= 2*pi*r;
    printf("circumference = %f", area);
    printf("area = %f", circ);
    return 0;
#include <stdio.h>
```

TEMPERATURE CONVERSION C TO F

```
int main()
{
  int c,far;
  printf("enter the temp in celsius");
  scanf("%d",&c);
  far= (c*9/5)+32;
  printf("temperature in fahrenheit= %d",far);
  return 0;
}
```

ASCII VALUE OF CHARACTER

```
#include <stdio.h>


int main()
{
    char c;
    printf("enter the character");
    scanf("%c",&c);
    printf("ASCII  value of c : %d",c);
    return 0;
}
```

AREA OF TRIANGLE

```
#include <stdio.h>


int main()
{
   int hei,base,area;
   printf("enter the base of the triangle");
   scanf("%d",&base);
   printf("enter the height of the triangle");
   scanf("%d",&hei);
   area= (base*hei)/2;
   printf("area of the triangle : %d", area);
   return 0;
}
```

PERCENTAGE OF 5 SUBJECTS

```
#include <stdio.h>


int main()
{
   int a,b,c,d,e;
   float p,total;
   printf("enter the marks of subject a");
   scanf("%d",&a);
   printf("enter the marks of subject b");
   scanf("%d",&b);
   printf("enter the marks of subect c");
   scanf("%d",&c);
   printf("enter the marks of subject d");
   scanf("%d",&d);
   printf("enter the marks of subject e");
   scanf("%d",&e);
   total= (a+b+c+d+e);
   p= (total/500)*100;
   printf("perentage = %f",p);
   return 0;

}
```

SIZE OF DATA TYPES

```
#include <stdio.h>


int main()
{
  int intType;
  float floatType;
  char charType;
  double doubleType;
  printf("size of int %d", sizeof(intType));
  printf("size of float %d", sizeof(floatType));
  printf("size of char %d", sizeof(charType));
  printf("size of double %d", sizeof(doubleType));
  return 0;
}
```

POSTIVE OR NEGATIVE NUMBER

```
#include<stdio.h>
Int main()
{
    int num;
    printf("enter the number");
    scanf("%d",&num);
    if(num>=0)
    {
        printf("number is positive");
    }
    else{
            printf("number is negative");
        }
        return 0;
}
```

Vowel or consonant

```
int main()
{
  int num;
  printf("enter the number");
  scanf("%d",&num);
  if(num>=0)
  {
      printf("number is positive");
  }
  else{
      printf("number is negative");
  }
  return 0;
}
```

FACTORIAL OF A NUMBER

```
#include <stdio.h>


int main()
{
    char ch;
    printf("Enter any character: ");
    scanf("%c", &ch);
    if(ch >= 'A' && ch <= 'Z')
    {
        printf("'%c' is uppercase alphabet.", ch);
    }
    else if(ch >= 'a' && ch <= 'z')
    {
        printf("'%c' is lowercase alphabet.", ch);
    }
    else
    {
        printf("'%c' is not an alphabet.", ch);
    }


    return 0;
}
```

UPPERCASE AND LOWERCASE NUMBER

```
#include <stdio.h>


int main()
{
    char ch;
    printf("Enter any character: ");
    scanf("%c", &ch);
    if(ch >= 'A' && ch <= 'Z')
    {
        printf("'%c' is uppercase alphabet.", ch);
    }
    else if(ch >= 'a' && ch <= 'z')
    {
        printf("'%c' is lowercase alphabet.", ch);
    }
    else
    {
        printf("'%c' is not an alphabet.", ch);
    }


    return 0;
}
```

GREATEST BETWEEN THREE NUMBERS

```
#include <stdio.h>


int main()
{
    int a,b,c;
    printf("enter three numbers");
    scanf("%d",&a);
    scanf("%d",&b);
    scanf("%d",&c);
    if(a>b && a>c){
        printf("a is the greatest number");
    }
    else if(b>c && b>a){
        printf("b is the greatest number");
    }
    else{
        printf("c is the greatest number");
    }
    return 0;
}
```

ELIGIBLE FOR VOTING OR NOT

```
#include <stdio.h>


int main()
{
    int age;
    printf("enter your age");
    scanf("%d",&age);
    if(age>=18){
        printf("you are eligible for voting");
    }
    else{
        printf("you are not eligible for voting");
    }
    return 0;
}
```

GREATER BETWEEN TWO NUMBER

```
#include <stdio.h>


int main()
{
    int a,b;
    printf("enter the first number");
    scanf("%d",&a);
    printf("enter the second number");
    scanf("%d",&b);
    if(a>b){
        printf("first number is greater");
    }
    else
    {
        printf("second number is greater");
    }
}
```

GREATER BETWEEN TWO NUMBERS

```
#include <stdio.h>


int main()
{
    int a;
    printf("enter the number");
    scanf("%d",&a);
    if(a%2==0){
        printf("number is even");
    }
    else
    {
        printf("number is odd");
    }
}
```

LEAP YEAR OR NOT

```
#include <stdio.h>


int main()
{
    int year;
    printf("ENTER A YEAR");
    scanf("%d",&year);
    if(year%400==0)
    {
        printf("its a leap year");
    }
    else
    {
        printf("not a leap year");
    }
    return 0;
}
```

VOWEL USING IF AND ELSE

```
#include <stdio.h>
int main()
{
  char ch;
  printf("enter the character");
  scanf("%c",&ch);
  if(ch=='a'|| ch=='e'|| ch=='i'|| ch=='o'|| ch=='u'){
      printf("its a vowel");
  }
  else if(ch=='A'|| ch=='E'|| ch=='I'|| ch=='O'|| ch=='U' ){
      printf("its a vowel");
  }
  else{
      printf("its a consonent");
  }
  return 0;
}
```

GREATEST BETWEEN THREE NUMBERS USING NESTED LOOP

```
#include <stdio.h>


int main()
#include <stdio.h>
int main()
{
   int a,b,c;
   printf("enter three number");
   scanf("%d",&a);
   scanf("%d",&b);
   scanf("%d",&c);
   if(a>b){
      {
         if(a>b){
            printf("%d is the greatest number",a);
         }
         else{
            printf("%d is the greatest number",c);
         }
      }
   }
   else if(b>a){
```

```
        if(b>c){
            printf("%d is the greatest number",b);
        }
        else{
            printf("%d is the greatest number",c);
        }
    }
    else{
        printf("%d is the greatest number",c);
    }
}
```

REVERSE OF NUMBER USING FOR LOOP

```
#include <stdio.h>
int main()
{
    int num,rev=0,rem,n;
    printf("enter the number");
    scanf("%d",&num);
    for(num>0;n=num;num=num/10)
    {
        rem=num%10;
        rev=(rev*10)+rem;
    }
    printf("%d reverse of the number",rev);
}
```

ARMSTRONG NUMBER

```
#include <stdio.h>


int main()
{
    int num,rem,n,arm=0;
    printf("enter the number");
    scanf("%d",&num);
    n=num;
    while(num>0)
    {
        rem= num%10;
        arm= arm+(rem*rem*rem);
        num= num/10;
    }
    if (arm==n){
        printf("%d is an armstrong number ",arm);
    }
    else{
        printf("its not an armstrong number");
    }


    return 0;
}
```

SIMPLE INTREST

```
#include <stdio.h>


int main()
{
   int p,r,t,si;
   printf("enter principal value");
   scanf("%d",&p);
   printf("enter rate");
   scanf("%d",&r);
   printf("enter time");
   scanf("%d",&t);
   si= (p*r*t)/100;
   printf("simple intrest = %d",si);
   return 0;


}
```

SUM OF NATURAL NUMBER

```
#include <stdio.h>
int main()
{
    int i=1,num,n=0;
    printf("enter the number");
    scanf("%d",&num);
    while(i<=num){
        n=n+i;
        i=i+1;
    }
    printf("sum of natural numbers = %d", n);

    return 0;
}
```

MULTIPLICATION TABLE

```
#include <stdio.h>


int main()
{
    int n,i=1,tab;
    printf("enter the number");
    scanf("%d",&n);
    for(i=1;i<=10;i++){
        tab=n*i;
        printf("%d\n",tab);
    }


}
```

GCD OF TWO NUMBER

```
#include <stdio.h>
int main()
{
    int n1, n2, i, GCD_Num;
    printf ( " Enter any two numbers: \n ");
    scanf ( "%d %d", &n1, &n2);


    for( i = 1; i <= n1 && i <= n2; ++i)
    {
        if (n1 % i ==0 && n2 % i == 0)
            GCD_Num = i;
    }

    printf (" GCD of two numbers %d and %d is %d.", n1, n2, GCD_Num);
    return 0;
}
```

LCM BETWEEN TWO NUMBERS

```
#include <stdio.h>

int main() {

    int n1, n2, max;

    printf("Enter two positive integers: ");
    scanf("%d %d", &n1, &n2);
    max = (n1 > n2) ? n1 : n2;

    while (1) {
        if ((max % n1 == 0) && (max % n2 == 0)) {
            printf("The LCM of %d and %d is %d.", n1, n2, max);
            break;
        }
        ++max;
    }
    return 0;
}
int main()
{
  char ch;
  printf("enter the character");
  scanf("%c",&ch);
```

REVERSE OF A NUMBER USING FOR LOOP

```
#include <stdio.h>
void main()
{
  int rev=0,rem=0,num;
  printf("enter the number");
  scanf("%d",&num);
  for(;num>0;num=num/10)
  {
      rem=num%10;
      rev=(rev*10)+rem;
  }
  printf("%d reverse of the number",rev);
}
```

PALINDRONE NUMBER

```
#include <stdio.h>
void main()
{
  int rev=0,rem=0,num,p;
  printf("enter the number");
  scanf("%d",&num);
  p=num;
  for(;num>0;num=num/10)
  {
      rem=num%10;
      rev=(rev*10)+rem;
  }
  printf("%d reverse of the number",rev);
  if(rev==p){
      printf("its a palindrone nummber");
  }
  else{
      printf("its not a palindrone number");
  }
}
```

COUNTING NUMBER OF DIGITS

```
#include <stdio.h>
int main()
{
   int n;
   int count=0;
   printf("Enter a number");
   scanf("%d",&n);
   while(n!=0)
   {
       n=n/10;
       count++;
   }

   printf("\nThe number of digits in an integer is : %d",count);
    return 0;
}
```

SWITCH CASE WEEK

```
#include <stdio.h>
void main()
{
    int w;
    printf("enter the day");
    scanf("%d",&w);
    switch(w){
        case 1 : printf("monday");
        break;
        case 2 : printf("tuesday");
        break;
        case 3 : printf("wednesday");
        break;
        case 4 : printf("thursday");
        break;
        case 5 : printf("friday");
        break;
        case 6 : printf("saturday");
        break;
```

```
        case 7 : printf("sunday");
        default: printf(" wrong input");
    }
}
```

CALCULATOR USING SWITCH CASE

```
#include <stdio.h>
void main()
{
    int num,a,b;
    printf("enter 1 for addition, 2 for subtraction,3 for multiplication, 4 for division,");
    scanf("%d",&num);
    switch(num){
        case 1 :  int add;
         printf("enter the value of a and b");
         scanf("%d",&a);
         scanf("%d",&b);
        add= a+b;
        printf("enter the value of a and b");
        scanf("%d",&a);
        scanf("%d",&b);
        printf("%d addition of two numbers=",add);
        break;
        case 2 :int sub;
         printf("enter the value of a and b");
         scanf("%d",&a);
         scanf("%d",&b);
        sub= a-b;
        printf("%d subtraction of  two numbers =",sub);
```

```
    break;
    case 3 : int mul;
    printf("enter the value of a and b");
    scanf("%d",&a);
    scanf("%d",&b);
    mul = a*b;
    printf("%d multiplication of two numbers =",mul);
    break;
    case 4 : int div;
    printf("enter the value of a and b");
    scanf("%d",&a);
    scanf("%d",&b);
    div =a/b;
    printf("division of two numbers = ",div);
    break;
    default : printf("wrong input please type between 1 to 4");

}


}
```

GRADING STUDENT USING SWITCH CASE

```
#include<stdio.h>

int main()
{
   int marks;
   printf("\nEnter The Marks Between 0 To 100:");

   printf("\nEnter The Mark: ");
   scanf("%d", &marks);

   if(marks>100)
   {

    printf("\nDon't Be Smart Enter your Marks Between Limit\n");
   }
   else
   {
   switch(marks/10)
   {
       case 10 :
       case 9 :

           printf("\n Your Grade is: A");
           break;
```

```
    case 8 :

       printf("\n Your Grade is: B" );
       break;
    case 7 :

       printf("\n Your Grade is: C" );
       break;
    case 6 :

       printf("\n Your Grade is: D" );
       break;
    case 5 :

       printf("\n Your Grade is: E" );
       break;
    case 4 :

       printf("\n Your Grade is: E--");
       break;
    default :

       printf("\n You Grade is: F or Fail\n");
  }
}
```

```
    return 0;
}
```