1)

#include<stdio.h>

float area(float);

int main()

{

float r,a;

printf("Enter the radius:");

scanf("%f",&r);

a=area(r);

printf("Area=%f",a);

return 0;

}

float area(float x)

{

float A;

A=3.14\*x\*x;

return A;

}

2)

#include<stdio.h>

int si(int,int,int);

int main()

{

int p,r,t,simple\_interest;

printf("Enter the principal:");

scanf("%d",&p);

printf("Enter the rate:");

scanf("%d",&r);

printf("Enter the time:");

scanf("%d",&t);

simple\_interest=si(p,r,t);

printf("Simple interest=%d",simple\_interest);

return 0;

}

int si(int p,int r,int t)

{

int SI;

SI=p\*r\*t;

return SI;

}

3)

#include<stdio.h>

int even\_odd(int);

int main()

{

int n,x;

printf("Enter the number:");

scanf("%d",&n);

x=even\_odd(n);

printf("%d",x);

return 0;

}

int even\_odd(int x)

{

if(x%2==0)

return 1;

else

return 0;

}

4)

#include<stdio.h>

int main()

{

int a[10],n,i;

printf("Enter the number to convert:");

scanf("%d",&n);

for(i=0;n>0;i++)

{

a[i]=n%2;

n=n/2;

}

printf("Binary of Given Number is ");

for(i=i-1;i>=0;i--)

{

printf("%d",a[i]);

}

return 0;

}

5)

#include<stdio.h>

void sum(int);

int main()

{

int n,s;

printf("Enter the number of terms:");

scanf("%d",&n);

sum(n);

return 0;

}

void sum(int x)

{

int s=0;

for(int i=1;i<=2\*x;i=i+2)

{

s=s+i;

}

printf("Sum of %d natural numbers= %d",x,s);

}

6)

#include<stdio.h>

int factorial(int);

int main()

{

int n,result;

printf("Enter the number:");

scanf("%d",&n);

result=factorial(n);

printf("The factorial of %d = %d",n,result);

return 0;

}

int factorial(int x)

{

int fact=1;

for(int i=1;i<=x;i++)

{

fact\*=i;

}

return fact;

}

7)

#include<stdio.h>

int factorial(int);

int combination(int,int);

int main()

{

int n,r,result;

printf("Enter the total number of items:");

scanf("%d",&n);

printf("Enter the number of selected items at a time:");

scanf("%d",&r);

result=combination(n,r);

printf("The combination = %d",result);

return 0;

}

int factorial(int x)

{

int fact=1;

for(int i=1;i<=x;i++)

{

fact\*=i;

}

return fact;

}

int combination(int n,int r)

{

int comb;

comb=factorial(n)/(factorial(n-r)\*factorial(r));

return comb;

}

8)

#include<stdio.h>

int factorial(int);

int permutation(int,int);

int main()

{

int n,r,result;

printf("Enter the total number of items:");

scanf("%d",&n);

printf("Enter the number of selected items at a time:");

scanf("%d",&r);

result=permutation(n,r);

printf("The number of arrangements = %d",result);

return 0;

}

int factorial(int x)

{

int fact=1;

for(int i=1;i<=x;i++)

{

fact\*=i;

}

return fact;

}

int permutation(int n,int r)

{

int perm;

perm=factorial(n)/factorial(n-r);

return perm;

}

9)

#include<stdio.h>

int search(int,int);

int main()

{

int num,dig,result;

printf("Enter the number:");

scanf("%d",&num);

printf("Enter the digit:");

scanf("%d",&dig);

result=search(num,dig);

if(result==1)

printf("The digit is present in the number");

else

printf("The digit is not present in the number");

return 0;

}

int search(int n,int x)

{

int c=0,r;

while(n)

{

n=n/10;

r=n%10;

if(r==x)

{

c++;

break;

}

}

return c;

}

10)

#include<stdio.h>

void pfactors(int);

int main()

{

int num;

printf("Enter the number:");

scanf("%d",&num);

pfactors(num);

return 0;

}

void pfactors(int n)

{

for(int i=2;i<=n;i++)

{

while(n%i==0)

{

printf("%d ,",i);

n=n/i;

}

}

}