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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Summation of two/ three integer number/Average | | | | | | | | | | | | | | | | |
| Step-1: Start  Step-2: input a,b,c  Step-3: avg=a+b+c/3  Step-4: print avg  Step-5: end | | | input a,b,c  print avg  avg =(a+b+c)/3 | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  float a,b,c, avg ;  scanf("%f%f%f",&a,&b,&c);  avg =(a+b+c)/3;  printf("%f", avg);  getch();  } | | | | | | |
| Area of triangle | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input b, h  Step-3: area=1/2\*b\*h  Step-4: print area  Step-5: end | | | input b, h  print area  area=1/2\*b\*h | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  float b,h,area;  scanf("%f%f",&b,&h);  area=b\*h/2;  printf("%f",area);  getch();  } | | | | | | |
| Area of Circle | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input r  Step-3: area=π\*r\*r  Step-4: print area  Step-5: end | | | input r  print area  area=π\*r\*r | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  float r,pi=3.1416,area;  scanf("%f",&r);  area=pi\*r\*r;  printf("%f",area);  getch();  } | | | | | | |
| Area of scalene triangle | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input a, b, c  Step-3: s=a+b+c/2  Step-4: area=sqrt(s\*(s-a)\*(s-b)\*(s-c))  Step-5: print area  Step-6: end | | | | | | | input a ,b,c  s=(a+b+c)/2  area=sqrt(s\*(s-a)\*(s-b)\*(s-c))  print area | | | | | | #include<stdio.h>  #include<conio.h>  #include<math.h>  main(){  float a,b,c,s,area;  scanf("%f%f%f",&a,&b,&c);  s=(a+b+c0/2;  area=sqrt(s\*(s-a)\*(s-b)\*(s-c));  printf("%f",area);  getch();  } | | | |
| Celcious to Ferhenheight C/5=(F-32)/9 | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input C  Step-3: F=(9\*C)/5+32  Step-4: print F  Step-5: end | | | | | | input C  print F  F=(9\*C)/5+32 | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  float C,F;  scanf("%f",&C);  F=(9\*C)/5+32;  printf("%f",F);  getch();  } | | |
| Ferhenheight to Celcious | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input F  Step-3: C=(F-32)\*5/9  Step-4: print C  Step-5: end | | | | | | input F  print C  C=(F-32)\*5/9 | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int C,F;  scanf("%d",&F);  C=(F-32)\*5/9;  printf("%d",C);  getch();  } | | |
| Leap Year | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input y  Step-3: (y%400==0)||  (y%100!=0))&&(y%4==0)  i. yes, go to step -4  ii. no, go to step -5  Step-4: print Leap Year  Step-5: print Not Leap Year  Step-6: end | | input y  (y%400==0)||  (y%100!=0)  &&(y%4==0)  yes no  print leap year  print not leap year | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int y;  scanf("%d",&y); if(((y%400==0)||(y%100!=0))&&(y%4==0))  printf(" Leap Year");  else  printf(" Not Leap Year");  getch();  } | | | | | |
| Even and odd number | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input n  Step-3: (n%2==0)  i. yes, go to step -4  ii. no, go to step -5  Step-4: print Even Number  Step-5: print Odd Number  Step-6: end | | input n    n%2==0  yes no    print Even Number  print Odd Number | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int n;  scanf("%d",&n);  if(n%2==0)  printf("Even Number");  else  printf("Odd Number");  getch();  }  Positive and Negative  int n;  scanf("%d",&n);  if(n>=0)  printf("Positive Number");  else  printf("Negative Number"); | | | | |
| Largest Number | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input a, b, c  Step-3: is (a>b&&a>c)  i. yes , a is largest number  ii. No go to step -4  Step-4: is (b>a&&b>c)  i. yes, b is largest number  ii. no, c is largest number  Step-5: end | | Input a, b, c  (a>b&&a>c)  yes  no  print A is largest Number  (b>a&&b>c)  yes  no    print B is largest Number  print C is largest Number | | | | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int a,b,c;  scanf("%d%d%d",&a,&b,&c);  if(a>b&&a>c)  printf("A is largest Number");  else if(b>a&&b>c)  printf("B is largest Number");  else  printf("C is largest Number");  getch();  } | |
| print 1 2 3 4 5 6 7……………. using loop | | | | | | | | | | | | | | | | |
| tep-1: start  Step-2: input n  Step-3: i=1  Step-4: is (i<=n)  i. yes , go to step-5  ii. no, go to step -7  Step-5:print i and go to step-6  Step-6: i=i+1 and repeat step-4  Step-7: end | | | | input n  i=1  i=i+1  i<=n  yes  print i  no | | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i, n;  scanf("%d",&n);  for(i=1;i<=n;i++){  printf("%d",i);  }  getch();  }  For string  #include<stdio.h>  #include<conio.h>  main(){  int i, n;  scanf("%d",&n);  for(i=1;i<=n;i++){  printf("Akmcc");  }  getch();  } | |
| GCD (greatest common Divisor) do….while | | | | | | | | | | | | | | | | |
| Step-1: Start  Step-2: input L, S  Step-3: R=L%S  Step-4: is (R==0)  i. yes, go to step -6  ii. no, go to step-5  Step-5: L=S, S=R , repeat step-3  Step-6: print S  Step-7: end | | R=L%S  Input L, S  R==0  yes  No  L=S, S=R  Print S | | | | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int l,s,r;  scanf("%d%d",&l,&s);  do{  r=l%s;  l=s;  s=r;  }  while(s!=0);  printf("%d",l);  getch();  } | |
| Gcd using for loop and LCD | | | | | | | | | | | | | | | | |
| Step-1: Start  Step-2: input L, S  Step-3: i=1  step-4: is (i<=l)  i. yes, go to step -5  ii. no, go to step-8  Step-5: is ( l%i==0&&s%i==0)  i. yes, go to step -6  ii. no, go to step-7  Step-6: gcd=i , go to step-7  Step-7: i=i+1, repeat step-4  Step-8: print gcd  Step-9: end  **For lcd**  Step-8: lcd=l\*s/gcd  Step-9: print lcd  lcd=l\*s/gcd  Step-10: end | | input l, s  i=1    i<=l  no  yes  l%i==0  &&s%i==0  no  i=i+1  yes  print gcd  gcd=i | | | | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i, l , s, gcd;  scanf("%d%d",&l,&s);  for(i=1;i<=l;i++){  if(l%i==0&&s%i==0){  gcd=i;  }  }  printf("%d"gcd);  getch();  }  **For lcd**  #include<stdio.h>  #include<conio.h>  main(){  int i, l , s, gcd, lcd;  scanf("%d%d",&l,&s);  for(i=1;i<=l;i++){  if(l%i==0&&s%i==0){  gcd=i;  }  }  lcd=l\*s/gcd;  printf("%d"lcd);  getch();  } | |
| Prime number | | | | | | | | | | | | | | | | |
| Step-1: Start  Step-2: input n  Step-3: i=2, count=0  step-4: is (i<=n)  i. yes, go to step -5  ii. no, go to step-8  Step-5: is ( n%i==0)  i. yes, go to step -6  ii. no, go to step-7  Step-6: count++ , go to step-7  Step-7: i=i+1, repeat step-4  Step-8: is (count==0)  i. yes, print prime number  ii. no, print Not prime number  Step-9: end | i<=n  input n  i=2, count=0  no  yes  n%i==0  no  i=i+1  yes  Count++  Count==0  no    yes  Print prime number  Print not prime number | | | | | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i,n,count=0;  scanf("%d",&n);  for(i=2;i<n;i++){  if(n%i==0){  count++;  break;  }  }  if(count==0)  printf(" Prime Number");  else  printf("Not Prime Number");  getch();  } | |
| 2+4+6……………..+n | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input n  Step-3: i=2  Step-4: is (i<=n)  i. yes , go to step-5  ii. no go to step -6  Step-5: sum=sum+i , i=i+2  and repeat step-4  Step-6: print sum  Step-7: end | 2+4+6……………..+50 | | | | | | | 22+42……………..+502 | | | | | | |  | |
| #include<stdio.h>  #include<conio.h>  main(){  int i,n=50,sum=0;  for(i=2;i<=n;i=i+2){  sum=sum+i;  }  printf("%d",sum);  getch();  } | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i,n=50,sum=0;  for(i=2;i<=n;i=i+2){  sum=sum+i\*i  }  printf("%d",sum);  getch();  } | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i,n,sum=0;  scanf("%d",&n);  for(i=2;i<=n;i=i+2){  sum=sum+i;  }  printf("%d",sum);  getch();  } | |
| 1+2+3+……………………..+n | | | | | | | | | | | | | | | | |
| Step-1: start  Step-2: input n  Step-3: i=1  Step-4: is (i<=n)  i. yes , go to step-5  ii. no go to step -6  Step-5: sum=sum+i , i++  and repeat step-4  Step-6: print sum  Step-7: end | | | | | input n  i=1, sum=0  sum=sum+i  i=i+1  i<=n  yes  no  print sum | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i,n,sum=0;  scanf("%d",&n);  for(i=1;i<=n;i++){  sum=sum+i;  }  printf("%d",sum);  getch();  } | |
| Factorial | | | | | | | | | | | | | | | | |
| Step-1: Start  Step-2: input n  Step-3: i=1, fact=1  step-4: is (n==0)  i. yes, go to step -  ii. no, go to step-5  Step-5: is ( i<=n)  i. yes, go to step -6  ii. no, go to step-7  Step-6: fact=fact\*i, go to step-7  Step-7: i=i+1, repeat step-4  Step-8: print fact  Step-9: end | | | | | n==0  i=1,fact=1  input n  yes    no  i<=n  no  i=i+1  yes  fact=fact\*i  Print fact  Print fact | | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i,n,fact=1;  scanf("%d",&n);  if(n==0){  printf("%d",fact);  }  else{  for(i=1;i<=n;i++){  fact=fact\*i;  }  printf("%d",fact);  }  getch();  }  #include<stdio.h>  #include<conio.h>  main(){  int i,n,fact=1;  scanf("%d",&n);  for(i=1;i<=n;i++){  fact=fact\*i;  }  printf("%d",fact);  getch();  } | |
| Gcd using do and while loop and LCD | | | | | | | | | | | | | | | | |
| while | do….. while | | | | | | | | while | | | | | | | do….. while |
| #include<stdio.h>  #include<conio.h>  main(){  int i=1,l,s,gcd;  scanf("%d%d",&l,&s);  while(i<=l){  if(l%i==0&&s%i==0){  gcd=i;  }  i++;  }  printf("%d",gcd);  getch();  } | #include<stdio.h>  #include<conio.h>  main(){  int i=1,l,s,gcd;  scanf("%d%d",&l,&s);  do{  if(l%i==0&&s%i==0){  gcd=i;  }  i++;  }  while(i<=l);  printf("%d",gcd);  getch();  } | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i=1,l,s,gcd,lcd;  scanf("%d%d",&l,&s);  while(i<=l){  if(l%i==0&&s%i==0){  gcd=i;  }  i++;  }  lcd=l\*s/gcd;  printf("%d",lcd);  getch();  } | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int i=1,l,s,gcd,lcd;  scanf("%d%d",&l,&s);  do{  if(l%i==0&&s%i==0){  gcd=i;  }  i++;  }  while(i<=l);  lcd=l\*s/gcd;  printf("%d",lcd);  getch();  } |
| Result grade | | | | | | | | | Age | | | | | | | |
| #include<stdio.h>  #include<conio.h>  main(){  int mark;  scanf("%d",&mark);  if(mark<=32)  printf("Your Result Grade Is Fail");  else if(mark<=39)  printf("Your Result Grade Is =D");  else if(mark<=49)  printf("Your Result Grade Is =C");  else if(mark<=59)  printf("Your Result Grade Is =B");  else if(mark<=69)  printf("Your Result Grade Is A- ");  else if(mark<=79)  printf("Your Result Grade Is A ");  else if(mark<=100)  printf("Your Result Grade Is A+ ");  else  printf("Your are Invalid");  getch();  } | | | | | | | | | #include<stdio.h>  #include<conio.h>  main(){  int age;  scanf("%d",&age);  if(age<=0)  printf("Your are not borned yet");  else if(age<=12)  printf("Your are child");  else if(age<=19)  printf("Your are teenager");  else if(age<=40)  printf("Your are young");  else  printf("Wish your long life");  printf("\nthank you");  getch();  } | | | | | | | |

Header File And Library Function

|  |  |
| --- | --- |
| Header File | Function |
| stdio.h =standard input output | abs() , div() , printf() , scanf() , putchar() , getchar() |
| conio.h = console input output | clrscr() , getch() , |
| math.h | sqrt() , pow() , sin() , cos() , tan() |
| graphics.h | arc() , bar() , circle() , line() |

Data Type

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type | Symbol | Lowest value | Highest value | Byte | Input function | Output function | Format Specifier |
| Character | char | -128 | 127 | 1 | scanf(), getch(),  getchar() | printf(),putch(),  putchar() | %c |
| Integer | int | -32768 | 32767 | 2 | scanf() | printf() | %d |
| Floating | float | 3.4\*10-38 | 3.4\*1038 | 4 | scanf() | printf() | %f |
| Double | double | 1.7\*10-308 | 1.7\*10308 | 8 | scanf(), gets() | printf(), puts() | %f |