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| #include<stdio.h>  int sum(int x)  { int s=0,d;  while (x>0)  { d=x%10;  s=s+d;  x=x/10;  }  return s;  }  void main()  { int a,b;  printf("Give number");  scanf("%d",&a);  b=sum(a);  printf("%d",b);  } | The above program finds sum of digits of a number. Input 23145 output 15. |

Similarly write functions for following.

1. First digit fd(23145)=2 fd(314)=3
2. Second digit sd(23145)=3 sd(314)=1
3. Sum of first two digits sfs(27145)=2+7=9
4. Third digit td(23145)=1 td(314)=3
5. Sum of first and third digits sft(27145)=2+1=3
6. Last even digit led(23145)=4 led(683)=8
7. Sum of even digits sed(23145)=2+4=6
8. Last digit multiple of 3 ld(619127)=9
9. Biggest digit bg(247156)=7 bg(253)=5
10. Number of digits nd(247159)=6 nd(251)=3
11. Location of biggest digit loc(247156)=4 loc(215)=1
12. Exchange last two digits ex(21715)=21751
13. Increment even digits inc(23768)=33779
14. Smallest factor sf(175)=5 sf(24)=2
15. Sum of factors sof(35)=5+7+35=47
16. Second smallest factor ssf(130)=5 ssf(24)=3
17. Factorial fact(5)=120 fact(7)=5040
18. Integer square root isr(27)=5 isr(49)=7
19. kth last digit kld(2314978,3)=9
20. Sum of numbers smn(5,9)=5+6+7+8+9=35
21. Sum of smallest factors susf(24,35)=2+5=7
22. Smallest common factor scf(84,105)=3
23. Smallest common multiplier lcm(24,36)=72
24. Sum of common factors smcf(84,105)=3+7+21=31
25. Greatest common factor gcd(280,350)=70
26. kth smallest factor ksf(24,5)=8 ksf(35,2)=7
27. Sum of digits of a number (x) which are more than y mr(273563,4)=6+5+7=18 mr(15732,3)=7+5
28. Sum of first k factors sm(24,5)=2+3+4+6+8=23
29. Delete kth last digit dl(4231576,3)=423176
30. Replace kth last digit by a given digit

rep(231576,3,8)=231876 rep(375468,1,9)=375469

1. Sum of digits between given range sdm(23158,3,9)= 8+5+3=16. sdm(516984,5,8)=8+6+5=19
2. Define function int fd(int x) to find the first digit of a number x. fd(371)=3.
3. Define function int fact(int x) to find factorial of a number x. fact(4)=24.
4. Define function int abc(int x) to find the factorial of first digit of number x. In this function any loop should not be used. [Hint: use function fd and fact]. abc(6413)=720.

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| include<stdio.h>  #include “fun”  void main()  { int a,b,c;  printf("Give 2 numbers");  scanf("%d %d",&a,&b);  c=pwr(a,b);  printf(" %d",c);  }  int pwr(int x,int n)  { int p=1,i;  for (i=1;i<=n;i++)  p=p\*x;  return p;  } | The above program two numbers. It finds power. Input 3 5 output 35=243. Input 7 3 output 73=343 |