**1.PROGRAM ON PRIME OR NOT IN “IF-ELSE” STATEMENT:**

#include <stdio.h>

void main()

{

int n;

printf("enter a number");

scanf("%d",&n);

if(n==2||n==3||n==5||n==7)

printf("prime number");

else if ((n%2!=0)&&(n%3!=0)&&(n%5!=0)&&(n%7!=0))

printf("prime number");

else

printf("not prime ");

}

**OUTPUT:**

**ENTER A NUMBER:56**

**NOT**

**(OR)**

**ENTER A NUMBER:13**

**PRIME NUMBER**

**2.Program On (+,-,\*,/,%) using “switch case”:**

#include <stdio.h>

void main()

{

int a,b;

char op;

printf("enter a number");

scanf("%d%d\n",&a,&b);

scanf("%c",&op);

switch(op)

{

case '+' :printf("%d",a+b);break;

case'-' :printf("%d",a-b);break;

case'\*' :printf("%d",a\*b);break;

case'/' :printf("%d",a/b);break;

case'%' :printf("%d",a%b);break;

default:printf("invalid input");break;

}

}

**OUTPUT:**

**enter a number10**

**8 \***

**80**

**3.Program on loop control structure (while,do-while,for):**

A.#include <stdio.h>

void main()

{

int i;

for(i=1;i<=5;i++)

printf("%d",i);

}

**OUTPUT:**

**6**

B.#include <stdio.h>

void main()

{

int i;

for(i=1;i<=20;i+=2);

printf("%d",i);

}

**output=21**

**C. #include <stdio.h>**

void main()

{

int i;

for(i=1;i<=100;i+=2)

printf("%d\n",i);

}

**Oddnos 1-99**

#include <stdio.h>

void main()

{

int i;

for(i=0;i<=100;i+=2)

printf("%d\n",i);

}

**Even no 0-100**

**##QUESTION:-**

**1.Print the digits and count of number**

**2.Print sum of the digits of a number**

**3.Reverse of number**

**4.A)Palindrome number or not.**

**B)Armstrong number or not.**

**5.**

**6.Armstrong Range..(Armstrong number=sum of the powers of each digit with number of each**

**7.Nth palindrome.**

**8.Nth prime and Nth Fibonacci number.**

**9.Sum of the prime numbers 101-500**

**10.find the nth number madesS**

**3.Reverse of number**

#include <stdio.h>

void main()

{

int n,r;

scanf("%d",&n);

while(n!=0)

{

r=n%10;

printf("%d",r);

n=n/10;

}

}

**OUTPUT:**

**4568**

**8654**

**2.Sum of digits in a number:**

#include <stdio.h>

void main()

{

int n,r,s=0;

scanf("%d",&n);

while(n!=0)

{

r=n%10;

s=s+r;

n=n/10;

}

printf("%d",s);

}

**OUTPUT:**

**521**

**8**

**1.Count and sum of digit number:**

**#include <stdio.h>**

void main()

{

int n,r,s=0,c=0;

scanf("%d",&n);

while(n!=0)

{

c++;

r=n%10;

s=s+r;

n=n/10;

}

printf("%d %d",c,s);

}

**OUTPUT:**

**235**

**3 10**

**4.A)PALINDROME OR NOT:**

#include <stdio.h>

void main()

{

int n,r,s=0,t;

scanf("%d",&n);

t=n;

while(t!=0)

{

r=t%10;

s=s\*10+r;

t=t/10;

}

if (n==s)

printf("palindrome");

else

printf("not palindrome");

}

**OUTPUT:**

**1974**

**not palindrome**

**2002**

**palindrome**

**B)Armstrong number or Not:**

#include <stdio.h>

void main()

{

int n,r,s=0,c;

scanf("%d",&n);

c=n;

while(n!=0)

{

r=n%10;

s=s+r\*r\*r;

n=n/10;

}

if(c==s)

printf(" **Armstrong**");

else

printf("**not Armstrong** ");

}

(OR)

#include <stdio.h>

void main()

{

int t,n,r,s=0,c=0;

scanf("%d",&n);

t=n;

while(t!=0)

{

c++;

t=t/10;

}

t=n;

while(t!=0)

{

r=t%10;

s=s+pow(r,c);

t=t/10;

}

if(n==s)

printf("yes");

else

printf("not ");

}

**OUTPUT:**

**235**

**not Armstrong**

**153**

**Armstrong**

**##Armstrong range 0-n**

#include <stdio.h>

void main()

{

int t,n,r,s,c,range;

scanf("%d",&range);

for(n=1;n<=range;n++)

{

t=n;

s=0;

c=0;

while(t!=0)

{

c++;

t=t/10;

}

t=n;

while(t!=0)

{

r=t%10;

s=s+ ceil (pow(r,c));

t=t/10;

}

if(n==s)

printf(" %d",n);

}

}

**OUTPUT:**

**100000**

**1 2 3 4 5 6 7 8 9 153 370 371 407 1634 8208 9474 54748 92727 93084**

**###PALINDROME Range 0-n:-**

#include <stdio.h>

void main()

{

int n,r,s,t,range;

scanf("%d",&range);

for(n=0;n<=range;n++)

{

t=n;

s=0;

while(t!=0)

{

r=t%10;

s=s\*10+r;

t=t/10;

}

if (n==s)

printf(" %d\n",n);

}

}

**OUTPUT:**

**100**

**0 1 2 3 4 5 6 7 8 9 11 22 33 44 55 66 77 88 99**

**##Find a Palindrome number:-**

#include <stdio.h>

void main()

{

int t,n,r,s,range,c=0,k;

scanf("%d",&k);

for(n=0;c<k ;n++)

{

t=n;

s=0;

while(t!=0)

{

r=t%10;

s=s\*10+r;

t=t/10;

}

if(n==s)

{c++;

}

}

printf(" %d=%d",c,n-1);

}

**OUTPUT:**

**15**

**15=55**