**OPERATORS:**

1. **Treasure** **hunt**:

#include <stdio.h>

int main()

{

int gc,lb,bb,bbp,bp,p;

printf("Enter no.of gold coins, ben's share, blackbeard’s share: ");

scanf("%d %d %d",&gc,&bp,&bbp);

lb=gc\*bp/100;

gc=gc-lb;

bb=gc\*bbp/100;

gc=gc-bb;

p=gc/3;

printf("%d\n%d\n%d",lb,bb,p);

return 0;

}

**Output**:

Enter no.of gold coins,ben's share, blackbeard’s share:

729 65 87

473

222

11

1. **Booka the Alien:**

#include <iostream>

using namespace std;

int main()

{

int n, years, weeks, days;

cout<<"Enter no. of days: ";

cin>>n;

years=n/365;

n-=years\*365;

weeks=n/7;

days=n-(weeks\*7);

cout<<years<<endl<<weeks<<endl<<days;

return 0;

}

**Output:**

Enter no. of days: 373

1

1

1

**LOOPING SERIES**:

1. **Series-6:**

#include <stdio.h>

int main()

{

int n,s=2;

printf("Enter no. of series to print: ");

scanf("%d",&n);

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

for(int i=0;i<n-1;i++)

{

s=(s\*2)-i;

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

}

}

**Output:**

Enter no. of series to print: 5

2 4 7 12 21

1. **Series-7:**

#include <stdio.h>

#include <math.h>

int main()

{

int n,s=1;

printf("Enter no. of series to print: ");

scanf("%d",&n);

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

{

s=pow(i,i);

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

}

}

**Output:**

Enter no. of series to print: 5

1 4 27 256 3125

1. **Series-8:**

#include <stdio.h>

#include <math.h>

int main()

{

int n,n1=10,n2=5;

printf("Enter no. of series to print: ");

scanf("%d",&n);

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

{

if(i%2==0) {

printf("%d\t",n2);

n2+=10;

}

else

{

printf("%d\t",n1);

n1+=50;

}

}

return 0;

}

**Output:**

Enter no. of series to print: 5

10 5 60 15 110

**RECURSION:**

1. **Decimal to binary:**

#include <stdio.h>

int main()

{

int bin=0, dec=0, i=1, rem=0;

printf("Enter a decimal number: ");

scanf("%d",&dec);

while (dec!=0)

{

rem=dec%2;

dec=dec/2;

bin+=rem\*i;

i\*=10;

}

printf("%d",bin);

return 0;

}

**Output:**

Enter a decimal number : 10

1010

**DECISION MAKING:**

1. **Calendar:**

#include <stdio.h>

int main()

{

int month,yr,leap;

printf("Month: ");

scanf("%d",&month);

printf("year: ");

scanf("%d",&yr);

leap=yr%4;

switch(month)

{

case 2:

if(leap==0)

printf("Number of days is 28");

else

printf("Number of days is 29");

break;

case 1:

case 3:

case 5:

case 7:

case 8:

case 10:

case 12:

printf("Number of days is 31");

break;

case 4:

case 6:

case 9:

case 11:

printf("Number of days is 30");

}

return 0;

}

**Output:**

Month: 3

year: 1996

Number of days is 31

1. **Tank:**

#include <stdio.h>

int main()

{

float rad, hgt, amt, hrs, vol, lit;

printf("Enter radius, heigth, amt\_of\_water, timetaken: ");

scanf("%f\t%f\t%f\t%f",&rad,&hgt,&amt,&hrs);

vol=3.416\*rad\*rad\*hgt;

lit=vol/amt;

if(lit<=hrs)

printf("The tank can be filled within %.2f hours",hrs);

else

printf("The tank cannot be filled within %.2f hours",hrs);

return 0;

}

**Output:**

Enter radius, heigth, amt\_of\_water, timetaken:

5 7 100 6

The tank can be filled within 6.00 hours

**ARRAY:**

1. **Odd – Even:**

#include <stdio.h>

int main()

{

int oddcount,evencount,a[10],size;

printf("Enter size: ");

scanf("%d",&size);

for(int i=0;i<size;i++)

{

scanf("%d",&a[i]);

}

for(int i=0;i<size;i++)

{

if(a[i]%2!=0)

oddcount++;

else

evencount++;

}

printf("Odd: %d\n", oddcount);

printf("Even: %d",evencount);

return 0;

}

**Output:**

Enter size: 5

1

6

8

2

4

Odd: 1

Even: 4