**Question 01**

#include<stdio.h>

#include<conio.h>

int main()

{ int a,b,c;

printf("Enter the first second and third number below\n");

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

printf("The distict values are as follows\n");

if(a!=b&&a!=c&&c!=b)

{

printf("%d\n%d\n%d",a,b,c);

}

else if(a==b&&a!=c)

{

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

}

else if (a==c&&a!=b)

{

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

}

else if (b==c&&a!=b)

{

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

}

else if (a==b==c)

{

printf("%d",a);

}

}

**Question 02**

#include<stdio.h>

#include<conio.h>

int main()

{

int month,day;

printf("Enter the number of the month you were born in\nFor Example\nFor Jaunuary enter 01\nFor February enter 02\n");

scanf("%d",&month);

printf("Enter the day you were born\n");

scanf("%d",&day);

if((month==1&&day<=19)||(month==12&&day>=22))

printf("Your zodaic sign is Capricorn");

else if((month==1&&day>=20)||(month==2&&day<=17))

printf("Your zodaic sign is Aquarius");

else if((month==2&&day>=18)||(month==3&&day<=19))

printf("Your zodaic sign is Pisces");

else if((month==3&&day>=20)||(month==4&&day<=19))

printf("Your zodaic sign is Aries");

else if((month==4&&day>=20)||(month==5&&day<=20))

printf("Your zodaic sign is Taurus");

else if((month==5&&day>=21)||(month==6&&day<=20))

printf("Your zodaic sign is Gemini");

else if((month==6&&day>=21)||(month==7&&day<=22))

printf("Your zodaic sign is Cancer");

else if((month==7&&day>=23)||(month==8&&day<=22))

printf("Your zodaic sign is Leo");

else if((month==8&&day>=23)||(month==9&&day<=22))

printf("Your zodaic sign is Virgo");

else if((month==9&&day>=23)||(month==10&&day<=22))

printf("Your zodaic sign is Libra");

else if((month==10&&day>=23)||(month==11&&day<=21))

printf("Your zodaic sign is Scorpio");

else if((month==11&&day>=22)||(month==12&&day<=21))

printf("Your zodaic sign is Sagittarius");

getch();

}

**Question 03**

#include<stdio.h>

#include<conio.h>

int main()

{

int n,j=0,count=0,nature=0;

printf("Enter the number you want to have a checkerboard design of...\n");

scanf("%d",&n);

printf("Your checkerboard design is as follows\n");

while(n>count)

{

while(nature%2==0)

{

while(n>j)

{

printf("\* ");

j++;

}

printf("\n");

j=0;

count++;

nature++;

}

while(nature%2==1)

{

while(n>j)

{

printf(" \*");

j++;

}

printf("\n");

j=0;

count++;

nature++;

}

}

}

**Question 04**

#include<stdio.h>

#include<conio.h>

int main()

{

int n,count=1,ones=1,twos=2,thirds=3;

printf("How many ordinals do you want to print\n");

scanf("%d",&n);

while(n>=count)

{ while(count%10==1)

{

printf("%dst Hello\n",count);

count++;

}

while(count%10==2)

{

printf("%dnd Hello\n",count);

count++;

}

while(count%10==3)

{

printf("%drd Hello\n",count);

count++;

}

while(count%10==4||count%10==5||count%10==6||count%10==7||count%10==8||count%10==9||count%10==0||count==11||count==12||count==13)

{

printf("%dth Hello\n",count);

count++;

}

}

}

**Question 05**

**Half Pyramid:**

#include<stdio.h>

#include<conio.h>

int main()

{

int n,j=1,count=1;

printf("Enter the number of rows you want in your half triangle...\n");

scanf("%d",&n);

while(n>=count)

{

while(count>=j)

{

printf("%d ",j);

j++;

}

printf("\n");

j=1;

count++;

}

getch();

}

**Inverted Half Pyramid:**

#include<stdio.h>

#include<conio.h>

int main()

{

int n,j=1,count1=1,count=1;

printf("Enter the number of rows you want in your half triangle...\n");

scanf("%d",&n);

j=n;

while(n>=count1)

{

while(j>=count)

{

printf("%d ",count);

count++;

}

printf("\n");

j--;

count=1;

count1++;

}

getch();

}

**Hollow Half pyramid:**

#include<stdio.h>

#include<conio.h>

int main()

{

int n,j=1,count=1,number=1;

printf("Enter the number of rows you want in your half triangle...\n");

scanf("%d",&n);

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

{

for(count=1;count<=j;count++)

{ for(number;number<=count;number++)

{

if(count==1||count==j||j==n)

printf("%d",number);

else

printf(" ");

}}

number=1;

printf("\n");

}

getch();

}

**Full Pyramid:**

#include<stdio.h>

#include<conio.h>

int main()

{

int rows=1,columns=1,num,a;

printf("How many rows do you want in your triangle?\n");

scanf("%d",&num);

for(rows;rows<=num;rows++)

{ a=rows;;

for(columns=1;columns<=2\*num-1;columns++)

{

if(columns>=num+1-rows&&columns<=num-1+rows)

{

printf("%d",a);

columns<num?a++:a--;

}

else

printf(" ");

}

printf("\n");

}

getch();

}

**Hollow Full Pyramid:**

#include<stdio.h>

#include<conio.h>

int main()

{

int i=1,j=1,n,num=2,num1=2;

printf("How many rows do you want in your triangle?\n");

scanf("%d",&n);

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

{

for(j=1;j<=2\*n-1;j++)

{

if(j==(n+1-i))

{

{

printf("1 ");

}

}

else if(j==(n-1+i)&&j!=n+1-i)

{

{

printf("%d ",num);

num++;

}

}

else if(i==n&&j%2!=0)

{

{

printf("%d ",num1);

num1++;

}

}

else

{

printf(" ");

}

}

printf("\n");

}

getch();

}

**Hollow Inverted Half Pyramid:**

#include<stdio.h>

int main()

{

int i=1,j=1,n;

printf("How many rows do you want in your triangle?\n");

scanf("%d",&n);

int count=n,num=n;

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

{

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

{

if(j==1||i==1||j==count)

{

printf("%d ",j+(i-1));

}

else

printf(" ");

}

printf("\n");

count--;

}

getch();

}