

Q1:-

```
#include <stdio.h>
int main()
{
    int i,n,num1=0,num2=1,next;
    printf("Enter a number\n");
    scanf("%d",&n);
    printf("The fibonacci series is:-\n%d\n%d\n",num1,num2);
    for(i=2;i<=n;i++)
    {
        next=num1+num2;
        printf("%d\n",next);
        num1=num2;
        num2=next;
    }
    return 0;
}
```

Q2:-

```
#include <stdio.h>
int main()
{
    int i,num1,num2;
    printf("Enter two numbers\n");
    scanf("%d %d",&num1,&num2);
    for(i=num1;i!=0;i--)
    {
        if(num1%i==0&&num2%i==0)
            break;
    }
    if(i)
        printf("HCF is :- %d",i);
    return 0;
}
```

Q3:-

```
(a)
#include<stdio.h>
int main(){
    int i,j;
    for(i=1;i<=4;i++)
    {
        for(j=1;j<=4;j++)
        {
            if(j>=5-i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}
```

Q3:-

```
(d)
#include<stdio.h>
int main(){
    int i,j,k;
    for(i=1;i<=4;i++)
    {
        k='A';
```

```

        for(j=1;j<=4;j++)
        {
            if(j<=5-i)
                printf("%c",k++);
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}
Q3:-
(b)
#include<stdio.h>
int main(){
    int i,j;
    for(i=1;i<=4;i++)
    {
        for(j=1;j<=7;j++)
        {
            if(j>=5-i&& j<=3+i)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

Q3:-
(c)
#include<stdio.h>
int main(){
    int i,j,k;
    for(i=1;i<=4;i++)
    {
        k=1;
        for(j=1;j<=7;j++)
        {
            if(j>=5-i&& j<=3+i)
            {
                printf("%d",k);
                j<4?k++:k--;
            }
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

```

Q3:-
(e)
#include<stdio.h>
int main(){
    int i,j;
    char k;
    for(i=1;i<=4;i++)
    {
        k='A';
    }
}

```

```

        for(j=1;j<=7;j++)
        {
            if(j>=i&& j<=8-i)
            {
                printf("%c",k);
                j<4?k++:k--;
            }
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

Q3:-  
(f)

```

#include<stdio.h>
int main(){
    int i,j,k;
    for(i=1;i<=4;i++)
    {
        k=1;
        for(j=1;j<=7;j++)
        {
            if(j>=i&& j<=8-i)
            {
                printf("%d",k);
                k=j>=i&& j<=6-i?0:1;
            }
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

Q3:-  
(g)

```

#include<stdio.h>
int main(){
    int i,j,k;
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=5;j++)
        {
            i<=3?(k=i):(k=6-i);
            if(j>=4-k&& j<=2+k)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
    return 0;
}

```

Q3:-  
(h)

```

#include<stdio.h>
int main(){
    int i,j,k;

```

```
for (i=1;i<=5;i++)
{
    k=6-i;
    for (j=1;j<=5;j++)
    {
        if (j<=6-i)
        {
            printf("%d",k);
            k--;
        }
        else
            printf(" ");
    }
    printf("\n");
}
return 0;
```