```
QUESTION 1
```

```
#include <stdio.h>
void main()
  int j, sum = 0;
  for (j = 1; j <= 10; j++)
  {
    sum = sum + j;
    printf("%d ",j);
  }
  printf("The Sum is : %d", sum);
}
QUESTION 2
#include <stdio.h>
int main() {
  int n, i=1;
  printf("Enter an integer: ");
  scanf("%d", &n);
  while (i <= 10)
 {
    printf("%d * %d = %d \n", n, i, n * i);
    ++i;
  }
  return 0;
}
QUESTION 3
#include<stdio.h>
int main()
{
```

```
int num,i=1, sum = 0;
  printf("Enter a number\n");
  scanf("%d", &num);
  do
  {
   sum = sum + 2*i-1;
   i++;
  }
  while(i < num);
  printf("Sum of ODD integer number is %d\n", sum);
  return 0;
}
QUESTION 4
#include <stdio.h>
void main()
{
 int i,j;
 for(i=1;i<=5;i++)
 {
       for(j=1;j<=i;j++)
        printf("*");
       printf("\n");
 }
}
QUESTION 5
#include <stdio.h>
void main()
{
```

```
int i,j,k=1;
for(i=1;i<5;i++)
{
    for(j=1;j<=i;j++)
        printf("%d",k++);
    printf("\n");
}</pre>
```

QUESTION 6

```
#include <stdio.h>
int main() {
    int i, space, rows, k = 0;
    printf("Enter the number of rows: ");
    scanf("%d", &rows);
    for (i = 1; i <= rows; ++i, k = 0) {
        for (space = 1; space <= rows - i; ++space) {
            printf(" ");
        }
        while (k != 2 * i - 1) {
            printf("* ");
        ++k;
        }
        printf("\n");
    }
    return 0;
}</pre>
```

QUESTION 7

#include <stdio.h>

```
int main() {
  int rows, coef = 1, space, i, j;
  printf("Enter the number of rows: ");
  scanf("%d", &rows);
 for (i = 0; i < rows; i++) {
   for (space = 1; space <= rows - i; space++)</pre>
     printf(" ");
   for (j = 0; j \le i; j++) {
     if (j == 0 | | i == 0)
       coef = 1;
     else
       coef = coef * (i - j + 1) / j;
     printf("%4d", coef);
   }
   printf("\n");
 }
  return 0;
QUESTION 8
#include <stdio.h>
int main() {
  int i, n, x = 0, y = 1, nt;
  printf("Enter the num: ");
  scanf("%d", &n);
  printf("Fibonacci Series: ");
  for (i = 1; i \le n; ++i) {
    printf("%d, ", x);
     nt = x + y;
     x = y;
```

```
y = nt;
 }
 return 0;
}
QUESTION 9
#include<stdio.h>
void main()
{
  int n, i=1, sum=0;
  printf("\n Enter a number: ");
  scanf("%d", &n);
 while(i<n)
  {
    if(n%i==0)
      sum=sum+i;
    }
    i++;
  }
  if(sum==n)
    printf("\n %d is a Perfect Number.",n);
  else
    printf("\n %d is Not a Perfect Number.",n);
}
QUESTION 10
#include <stdio.h>
void main(){
```

```
int num,r,sum,temp;
  int stno,enno;
  printf("Input starting range: ");
  scanf("%d",&stno);
  printf("Input ending range : ");
  scanf("%d",&enno);
  printf("Armstrong numbers in given range are: ");
  for(num=stno;num<=enno;num++){</pre>
    temp=num;
    sum = 0;
    while(temp!=0){
       r=temp % 10;
      temp=temp/10;
       sum=sum+(r*r*r);
    }
    if(sum==num)
       printf("%d ",num);
  }
printf("\n");
QUESTION 11
#include <stdio.h>
int main() {
  int n, i, flag = 0;
  printf("Enter a num: ");
```

}

```
scanf("%d", &n);
  for (i = 2; i \le n / 2; ++i)
  {
    if (n % i == 0) {
      flag = 1;
       break;
    }
  }
  if (n == 1) {
    printf("1 is neither prime nor composite.");
  }
  else {
    if (flag == 0)
       printf("%d is a prime number.", n);
    else
       printf("%d is not a prime number.", n);
  }
  return 0;
}
```

QUESTION 12

```
#include <stdio.h>
void main(){
  int num,r,sum=0,t;
```

```
printf("Input a number: ");
  scanf("%d",&num);
  t=num;
  do{
    r=num % 10;
    sum=sum*10+r;
    num=num/10;
  }
    while(num!=0);
printf("reverse order : %d \n",sum);
}
QUESTION 13
#include <stdio.h>
void main()
{ long int n,i,t=9;
       int sum =0;
       printf("enter the number or terms :");
      scanf("%ld",&n);
       for (i=1;i<=n;i++)
       { sum +=t;
        printf("%ld ",t);
       t=t*10+9;
       }
       printf("\nThe sum of the series = %d \n",sum);
}
QUESTION 14
```

#include <stdio.h>

```
void main()
{
       float x,sum,t,d;
       int i=1,n;
       printf("Input the Value of x :");
       scanf("%f",&x);
       printf("Input the number of terms : ");
       scanf("%d",&n);
       sum =1; t = 1;
       while (i<n)
       {
        d = (2*i)*(2*i-1);
        t = -t*x*x/d;
        sum =sum+ t;
        i++;
       }
       printf("\nthe sum = %f\nNumber of terms = %d\nvalue of x = %f\n",sum,n,x);
}
QUESTION 15
#include <stdio.h>
#include <math.h>
void main()
{
       int x,sum,ctr;
       int i=1,n,m,mm,nn;
       printf("Input the value of x :");
       scanf("%d",&x);
```

printf("Input number of terms : ");

```
scanf("%d",&n);
       sum =x; m=-1;
       printf("The values of the series: \n");
       printf("%d\n",x);
  do
  {
    ctr = (2 * i + 1);
    mm = pow(x, ctr);
    nn = mm * m;
    printf("%d \n",nn);
    sum = sum + nn;
    m = m * (-1);
    i++;
       }
       while(i < n);
       printf("\nThe sum = %d\n",sum);
}
```