```
Assignment-12
```

```
Write a recursive function to print first N natural
\bigcirc
       number.
1
     #tinclude < stdio h7
      Void display (int)),
       int main ()
         int n!
         Printf (" Enter the number of terms to be print \n");
         Seamf ("/d", &n);
         Bihtf ("In Notural number from 1 to ridare: "in);
         display (n);
                                       #include(stdioh)
          returno;
                                                              N Natural
                                       voidpoint (intN);
                                        int man ()
        void display (int num)
                                         print(o);
          if (num)
                                          vaid print (int N)
            display (num -1);
         else return;
                                          1 if (N>=1)
                                            [ prutf ("xd", N);
         Prints (" \n:d\n", num);
                                             Print(N-1);
2) write a program recursive function to print first H notural
     number in reverse order.
     # include < statio. h)
      void print (intN);
       int main()
          Print(10) /
        void print (int N)
          if (N7=1)
           Printf (" xd", N);
          Print (N-1);
```

```
13 write a recurrine function to print first N odd natural number
   #tinclude ( sidioth >
     void odd (inth);
    int main()
    3
       int n:
      Brints ("tuter any number");
      Sconf (" Y.d ", 4n);
      brints ( "First xed odd natural numbers are (n", n);
      odd (n);
     Void odd (inta)
        if (a>=1)
        odd (a -1);
        Printf ("xd", 2*a-1);
    write a recursive function to print first Nodd natural numbers in
     nicusive order.
    #include < stdio.h>
      vaid odd (int N);
      int main ()
        Printf(" Enter any number");
       seaf ("xd", &n);
        Prints ("First "d odd natural number are (n", n);
        odd (n);
       vaid odd (inta)
        ( if (a)=1)
            Printf(" xd", 2* a-1);
          V odd (a-1);
```

```
write a recursive function to print first N even natural number
 #include 25+dio. h>
   void even (int N);
   int main()
     int n;
     Printf ("Fater any number");
     Scanf ("xd", 4n);
     Brintfl'' first yd even notoral number are \n'', n);
      even (n);
    Void even (inta)
      if (a) = 1)
      even (a-1);
      Butf("xd", 2*a);
write a recursive fraction to print first A even natural number in
ouversées order.
  #include (stdio.h)
  void even (int N);
  ind marne
   intn;
    Prints ("Enter any number"):
    Sconf (" " d" | &n)
    Printf ("first" d even natural number in reverse order are (n", n)!
     even(n);
   Vaid even (int a)
    if (a>=1)
     Printf(">d", 2*a);
      even (a-1);
```

```
unite a recursive function to print square of first N natural number
    #include 237diosh7
     void square (int N);
     int main ()
     ξ
       int n!
       Printf ("Enter any number");
       Scanf (">d",4n);
       Printf ("First Xd square natural number are \n", n);
        Sware (n);
         Vaid square (inta)
         \begin{cases} ir(a>=1) \end{cases}
          Square (a-1);
          Printf (11 / d", a+a);
8
     write a recursive function to print binary of a given decimal number
     #include (stdio:h)
      void binary (int );
      int main ()
     ( int n;
        Prints ("Enter decimal number");
        Sconf ("xd", 4n);
       Bontf ("binary "od is", m);
        bi nary (n);
        void binary (inta)
       f if (9 == 1)
         Prints ("x d", 9);
        ehe
          binary (9/2);
         Prints (1/2/2);
```

```
write a recursive function to print octal of a given decimal number
 ➂
     #include (Stdio. h)
       hat mad
Void octal (int);
       ind main !
         int n;
        Printf("Enter decimal number");
         Scan A (">, d", 4 n);
         Brints ("octal Xid is ", n);
         octal (n);
         Vaid octal (inta)
         if (a>=1)
           octal (9/8),
          Printf (">1", a = 8);
        3
     write a recursive function to print reverse of 9 given number.
(
    Hinclude < Adio. h)
     Void revouse (int);
    int main()
       Printf ("fater any number");
        Seamt (" d", En);
        printf ("reverse of dis ", n);
        reverse (n);
        void reverse (inta)
       1 if (97=1)
          Printf("%d", a%10);
         reverse (a/10):
```