Assignment – 6

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Q1. Write a program to calculate sum of first N natural numbers ?

Ans :- # include <stdio.h>

int main()

{ int i, n, sum = 0;

  printf("Enter a Number :-");

  scanf("%d",&n);

  for(i=1;i<=n;i++)

  sum = sum + i ;

  printf("Sum of %d terms is :- ",n);

  printf("%d",sum);

  return 0;

}

Q2. Write a program to calculate sum of first N even natural numbers

Ans :- # include <stdio.h>

int main()

{ int i, n, sum = 0;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=0;i<=n;i=i+2)

  sum = sum + i ;

  printf("Sum of %d Even terms is :- ",n);

  printf("%d",sum);

  return 0;

}

Q3. Write a program to calculate sum of first N odd natural numbers

Ans :- # include <stdio.h>

int main()

{ int i, n, sum = 0;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=1;i<=n;i=i+2)

  sum = sum + i ;

  printf("Sum of %d Odd terms is :- ",n);

  printf("%d",sum);

  return 0;

}

Q4. Write a program to calculate sum of squares of first N natural ?

Ans :- # include <stdio.h>

int main()

{ int i, n, sum = 0;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=1;i<=n;i++)

  sum = sum + i \* i ;

  printf("Sum of Squares is :- ",n);

  printf("%d",sum);

  return 0;

}

Q5. Write a program to calculate sum of cubes of first N natural

Ans :- # include <stdio.h>

int main()

{ int i, n, sum = 0;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=1;i<=n;i++)

  sum = sum + i \* i \* i ;

  printf("Sum of Cubes is :- ",n);

  printf("%d",sum);

  return 0;

}

Q6. Write a program to calculate factorial of a number

Ans :- # include <stdio.h>

int main()

{ int i, n, fact = 1;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=n;i>=1;i--)

  fact = fact \* i ;

  printf("Factorial of %d is :- ",n);

  printf("%d",fact);

  return 0;

}

Q7. Write a program to count digits in a given number

Ans :- # include <stdio.h>

int main()

{ int i, num , count = 0;

  printf("Enter a Number :- ");

  scanf("%d",&num);

  while(num!=0){

  num = num / 10 ;

  count++ ; }

  printf("Number of Digits is :- ");

  printf("%d",count);

  return 0;

}

Q8. Write a program to check whether a given number is a Prime number or not

Ans :- # include <stdio.h>

int main()

{ int i, n ;

  printf("Enter a Number :- ");

  scanf("%d",&n);

  for(i=2;i<=n-1;i++){

  if(n%i==0)

  break ; }

  if(i==n)

    printf("Prime Number");

  else

    printf("Not a Prime NUmber");

  return 0;

}

Q9. Write a program to calculate LCM of two numbers

Ans :- # include <stdio.h>

int main()

{ int i, a , b ;

  printf("Enter Two Numbers :- ");

  scanf("%d%d",&a,&b);

  for(i=a>b?a:b;i<=a\*b;i++)

  if(i%a==0 && i%b==0)

  break ;

  printf("LCM of Numbers is = %d",i);

  return 0;

}

Q10. Write a program to reverse a given number

Ans :- # include <stdio.h>

int main()

{ int i, num , r , N = 0 ;

  printf("Enter a Number :- ");

  scanf("%d",&num);

  while(num!=0){

  r = num % 10;

  N = N \* 10 + r ;

  num = num / 10 ; }

  printf("Reversed Number is = %d",N);

  return 0;

}