* **Name** : **Rushikesh Gaware**
* **WhatsApp Number** : **9662631201**
* **Email Id** :

[**gawarerishi@gmail.com**](mailto:gawarerishi@gmail.com)

\*\*Function In C\*\*

Q.1. Write a function to calculate the area of a circle. (TSRS)

Ans:

#include<stdio.h>

float area(float);

float main()

{

float r,a;

printf("Enter Radious of Circle");

scanf("%f",&r);

a=area(r);

printf("%f",a);

}

float area(float p)

{

float s;

s=3.14\*(p\*p);

return s;

}

Q.2. Write a function to calculate simple interest. (TSRS)

Ans:

#include<stdio.h>

float simpleinterest(float,float,float);

int main()

{

float s,amount,time,ri;

printf("\*Enter amount\n");

scanf("%f",&amount);

printf("Enter Enter Time in (Year)\n");

scanf("%f",&time);

printf("Enter rate Of Interest\n");

scanf("%f",&ri);

s=simpleinterest(amount,time,ri);

printf("The Simple Interest=%f",s);

}

float simpleinterest(float a,float r,float t)

{

int si;

si=a\*(1+r\*t)/100;

return si;

}

Q.3.Write a function to check whether a given number

is even or odd. Return 1 if the number is even,

otherwise return 0. (TSRS).

Ans:

#include<stdio.h>

int checkn(int);

int main()

{

int n,p;

printf("Enter A Number");

scanf("%d",&n);

p=checkn(n);

printf("%d",p);

}

int checkn(int s)

{

if(s%2==0)

return 1;

else

return 0;

}

Q.4. Write a function to print first N natural numbers (TSRN)

Ans:

#include<stdio.h>

void natural(int);

int main()

{

int n,p;

printf("Enter A Number");

scanf("%d",&n);

natural(n);

return 0;

}

void natural(int s)

{

if(s>0)

{

natural(s-1);

printf("%d ",s);

}

}

Q.5. Write a function to print first N odd natural

numbers. (TSRN)

Ans:

#include<stdio.h>

void odd(int);

int main()

{

int n;

printf("Enter A Number");

scanf("%d",&n);

odd(n);

return 0;

}

void odd(int p)

{

int i;

for(i=1;i<=p;i++)

printf("%d\n",2\*i-1);

}

Q.6. Write a function to calculate the factorial of a number. (TSRS)

Ans:

#include<stdio.h>

int fact(int);

int main()

{

int n;

printf("Enter A Number");

scanf("%d",&n);

printf("%d",fact(n));

return 0;

}

int fact(int p)

{

int i,j=1;

for(i=1;i<=p;i++)

{

j=j\*i;

}

return j;

}

Q.7. Write a function to calculate the number of

combinations one can make from n items and r

selected at a time. (TSRS)

Ans:

#include<stdio.h>

int fact (int);

int combi(int,int);

int main()

{

int n,r,s;

printf("Enter Two Numbers");

scanf("%d %d",&n,&r);

printf("%d",combi(n,r));

}

int fact(p)

{

int i,j=1;

for (i=1;i<=p;i++)

j=j\*i;

return j;

}

int combi(int a,int b)

{

int c;

c=fact(a)/fact(b)\*fact(a-b);

return c;

}

Q.8. Write a function to calculate the number of

arrangements one can make from n items and

r selected at a time. (TSRS)

Ans:

#include<stdio.h>

int fact (int);

int arange(int,int);

int main()

{

int n,r,s;

printf("Enter Two Numbers");

scanf("%d %d",&n,&r);

printf("%d",arange(n,r));

}

int fact(p)

{

int i,j=1;

for (i=1;i<=p;i++)

j=j\*i;

return j;

}

int arange(int a,int b)

{

int c;

c=fact(a)/fact(b);

return c;

//c=fact(a)/fact(b) permutation formula by

//google

}

Q.9. Write a function to check whether a given

number contains a given digit or not. (TSRS)

Ans:

#include<stdio.h>

int check (int,int);

int main()

{

int n,m,i,o;

printf("Enter A Number");

scanf("%d",&n);

printf("Enter A Digit");

scanf("%d",&m);

o=check(n,m);

if(o==m)

printf("The %d Number Contains The %d Digit",n,m);

else

printf("The %d Number Does Not Contains %d Digit ",n,m);

}

int check (int a,int b)

{ int c;

while(a>0)

{

c=a%10;

a=a/10;

if(c==b)

return c;

}

return a;

}

Q.10. Write a function to print all prime factors of a

given number. For example, if the number is 36

then your result should be 2, 2, 3, 3. (TSRN

Ans:

#include<stdio.h>

void primefactors(int num)

{

int count;

printf("\nPrime Factors of %d are ..\n", num);

for(count = 2; num > 1; count++)

{

while(num % count == 0)

{

printf("%d ", count);

num = num / count;

}

}

printf("\n");

}

int main()

{

int num;

printf("Enter a positive integer\n");

scanf("%d", &num);

primefactors(num);

return 0;

}