***Programming Fundamentals Lab5 Assignment.***

***20k-0157***

**Q1.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int num=0,total=0;

while(1)

{

printf("Enter num: ");

scanf("%d",&num);

if (num>200 && num<400){

total=total+num;

}

else

break;

}

printf("Total is %d",total);

return 0;

}

**Q2.**

#include <stdlib.h>

#include <stdio.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main() {

char c1,i;

int count;

i='y';

while(i=='y'){

printf("Enter any character other than z: ");

scanf(" %c",&c1);

if (c1!='z' && c1!='Z'){

count=count+1;

}

else if (c1=='z' || c1=='Z'){

i='n';

}

}

printf("Number of characters entered: %d",count);

return 0;

}

**Q3.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int a=101,N,i;

printf("Enter N: ");

scanf("%d",&N);

printf("First %d Three Digit odd numbers are: \n101\n",N);

for (i=2;i<=N;i++){

a+=2;

if(a>=100 && a<=999)

printf("%d\n",a);

else {

printf("Error limit exceeded !! ");

break;

}

}

return 0;

}

**Q4.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

const int a=50;

char str[a],find;

int count=0,i;

printf("Enter a string: ");

gets(str);

printf("Enter a character to find the frequency: ");

scanf("%c",&find);

for (i=0;i<=a;i++){

if (str[i]==find || str[i]==toupper(find) || str[i]==tolower(find))

count=count+1;

}

printf("Frequency of %c: %d",find,count);

return 0;

}

**Q5.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int start,stop,i,a=0,count=0;

printf("Enter Starting number: ");

scanf("%d",&start);

printf("Enter Ending number > Starting number: ");

scanf("%d",&stop);

for(i=start;i<=stop;i++){

a=i%5;

if (a==0)

count=count+1;

}

printf("Number of multiples of 5 between %d and %d are %d",start,stop,count);

return 0;

}

**Q6.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int start,stop,i,a=0,count=0;

printf("Enter Starting number: ");

scanf("%d",&start);

printf("Enter Ending number > Starting number: ");

scanf("%d",&stop);

for(i=start;i<=stop;i++){

a=i%5;

if (a==0)

count=count+1;

}

printf("Number of multiples of 5 between %d and %d are %d",start,stop,count);

return 0;

}

**Q7.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int exp,base,i,a=1;

printf("Enter a base number: ");

scanf("%d",&base);

printf("Enter an exponent: ");

scanf("%d",&exp);

for (i=1;i<=exp;i++){

a=a\*base;

}

printf("Answer = %d",a);

return 0;

}

**Q8.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int var=100;

for(var=100;var>=1;var--){

printf("%d\n",var);

if(var==88){

printf("Out of for-loop");

break;

}

}

return 0;

}

**Q9.**

#include <stdio.h>

#include <stdlib.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int i,j,k,n;

printf("Enter N: ");

scanf("%d",&n);

for (i=1;i<=n;i++){

for (k=1;k<=i;k++){

printf("%d ",k);

}

for(j=1;j<=n-i;j++){

printf("\* ");

}

printf("\n");

}

return 0;

}