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**Section : E-1**

//1:

cout << "enter the number:";

int num;

cin >> num;

int square = num \* num;

int cube = num \* num \* num;

cout << "square:" << square << "\ncube:" << cube;

//2:

cout << "how many numbers you want to calculate:";

int choice0;

cin >> choice0;

if (choice0 == 2)

{

cout << "enter first number:";

float num1;

cin >> num1;

cout << "enter second number:";

float num2;

cin >> num2;

cout << "press\n \* for multiplication\n / for division\n + for addition\n - for subtraction\n\n your choice:";

char choice1;

cin >> choice1;

if (choice1 == '\*')

cout << num1 \* num2;

else if (choice1 == '/')

cout << num1 / num2;

else if (choice1 == '-')

cout << num1 - num2;

else if (choice1 == '+')

cout << num1 + num2;

else

cout << "invalid input";

}

else if (choice0 == 3)

{

cout << "enter first number:";

float num1;

cin >> num1;

cout << "enter second number:";

float num2;

cin >> num2;

cout << "enter the third number:";

float num3;

cin >> num3;

cout << "press\n \* for multiplication\n / for division\n + for addition\n - for subtraction(note:the arithmetic operations will be performed in order the numbers are input)\n\n your choice:";

char choice1;

cin >> choice1;

if (choice1 == '\*')

cout << num1 \* num2 \* num3;

else if (choice1 == '/')

cout << num1 / num2 / num3;

else if (choice1 == '-')

cout << num1 - num2 - num3;

else if (choice1 == '+')

cout << num1 + num2 + num3;

else

cout << "invalid input";

}

else

cout << "invalid input";

//3:

cout << "enter first number:";

float num1;

cin >> num1;

cout << "enter second number:";

float num2;

cin >> num2;

cout << "average:" << (num1 + num2) / 2;

//4:

cout << "enter distance(meters):";

float distance;

cin >> distance;

cout << "enter time(seconds):";

float time;

cin >> time;

cout << "velocity: " << distance / time<<"meter/second";

//5:

cout << "enter velocity(meter/second):";

float velocity;

cin >> velocity;

cout << "enter time(second):";

float time;

cin >> time;

cout << "acceleration: " << velocity / time << "meter per second per second";

//6:

float base, height ;

cout << "enter base:";

cin >> base;

cout << "enter height:";

cin >> height;

float area = base \* height;

cout << "area:" << area;

//7:

cout << "enter obtained marks:";

float obtainedMarks,totalMarks;

cin >> obtainedMarks;

cout << "enter total marks:";

cin >> totalMarks;

cout << "percentage:" << (obtainedMarks / totalMarks) \* 100;

//8:

float amount, taxPercentage, tax;

cout << "enter amount:";

cin >> amount;

cout << "enter tax percentage:";

cin >> taxPercentage;

tax = (taxPercentage / 100) \* amount;

cout << "tax:" << tax;

//9:

float mins, hrs, sec;

cout << "enter hours:";

cin >> hrs;

mins = hrs \* 60;

sec = mins \* 60;

cout << "minutes:" << mins << "\nseconds:" << sec;

//10:

float mass, velocity, radius, force;

cout << "enter one-by-one\

\n1.mass\

\n2.radius\

\n3.velocity"<<endl;

cin >> mass >> radius >> velocity;

force = (mass \* velocity \* velocity) / radius;

cout << "force" << force;

//11:

float A, x, y, z;

cout << "enter x,y,z:" << endl;

cin >> x >> y >> z;

A = (4 \* x - 3 \* y) / 2 \* z;

cout << "A:" << A;

//12:

float D, x, v, t, a;

cout << "enter x,v,t,a"<<endl;

cin >> x>>v>>t>> a;

D = x + v \* t + (1 / (2 \* a \* t \* t));

cout << "D:" << D;

//13:

float A, b, a, c;

cout << "enter a,b,c:"<<endl;

cin >> a >> b >> c;

A = ((a - b) \* (a - b)) / (2 \* c);

cout << "A:" << A;

//14:

float E, m, v, g, h;

cout << "enter m,v,g,h:" << endl;

cin >> m >> v >> g >> h;

E = ((m \* v \* v) / 2 + (m \* g \* h));

cout << "E:" << E;

//15:

float A, a, b;

cout << "enter a,b:" << endl;

cin >> a >> b;

A = ((a + b) \* (a + b)) - 2 \* a \* b;

cout << "A:" << A;

//16:

int a, b;

cout << "enter first and second number:";

cin >> a >> b;

int difference = a - b;

if (difference < 0)

cout << "absolute value:" << difference \* -1;

else

cout << "absoulute value:" << difference;

//17:

int a, b;

cout << "enter two numbers a and b:";

cin >> a >> b;

if (a > b)

cout << "a is greater than b";

else

cout << "b is greater than a";

//18

cout << "enter a number:";

int a;

cin >> a;

if (a < 0)

cout << "a is negative";

else

cout << "a is positive";

//19

float a, b;

cout << "enter first number:";

cin >> a;

cout << "enter second number:";

cin >> b;

if (a == b)

cout << "both are same";

else

cout << "both are not same";

//20

float a, b, difference;

cout << "enter two numbers:";

cin >> a >> b;

difference = a - b;

if (difference > 0)

cout << a \* b;

else

cout << "difference is less than 0";

//21

float a, b, sum;

cout << "enter the two numbers:";

cin >> a >> b;

sum = a + b;

if (sum > 50)

cout << "sum is greater than 50";

else

cout << "sum is less than 50";

//22

float a, b, c, sum;

cout << "enter the first two numbers:";

cin >> a >> b;

cout << "enter the third number :";

cin >> c;

sum = a + b;

if (sum > c)

cout << "sum of the two numbers is greater than 50";

else

cout << "sum of the two numbers is less than 50";

//23

float a, b;

cout << "enter two numbers:";

cin >> a >> b;

if (b > 0)

cout << a / b;

else

cout << "2nd number is less than zero";

//24

float marks, totalMarks;

cout << "enter marks and total marks:";

cin >> marks >> totalMarks;

float percentage = (marks / totalMarks) \* 100;

cout << "enter passing percentage:";

float passingPercentage;

cin >> passingPercentage;

if (percentage >= passingPercentage)

cout << "you have passed";

else

cout << "you have failed";

//25

float a, b, difference;

cout << "enter two numbers:";

cin >> a>>b;

difference = a - b;

if (difference > 10)

cout << a / b;

else

cout << a \* b;

//26

float a, b, average;

cout << "enter two numbers: ";

cin >> a >> b;

average = (a + b) / 2;

if (average > 0)

cout << "average is positive";

else

cout << "average is negative";

//27

float a, b, sum;

cout << "enter two numbers:";

cin >> a >> b;

sum = a + b;

if (sum > 100)

cout << a \* b;

else

cout << a / b;

//28

float a, b,product;

cout << "enter two numbers:";

cin >> a >> b;

product = a \* b;

if (product < 0)

cout << "product is negative ";

else

cout << "product is positive";

//29

float a, b, sum;

cout << "enter two numbers:";

cin >> a >> b;

sum = a + b;

if (sum > 100)

cout << a - b;

else

cout << a / b;

//30

float a, b, c, avg;

cout << "enter three numbers:";

cin >> a >> b >> c;

avg = (a + b + c) / 2;

if (avg > 0)

cout << "average is positive";

else

cout << "average is negative";

//31

float a, b, sum;

cout << "enter two numbers:";

cin >> a >> b;

if (b == 0)

b += 5;

sum = a + b;

cout << sum;

//32

float a, b;

cout << "enter two numbers:";

cin >> a >> b;

if (0 > b > 10)

cout << a/b;

else

cout << "second number must lie between 0 and 10";

//33

float a, b;

cout << "enter two numbers";

cin >> a >> b;

if (a == 0 || b == 0)

cout << a + b;

else

cout << "either one of the inputs must be zero";

//34

float marks1, marks2;

cout << "enter total marks out of 100 for 1st and 2nd subject:";

cin >> marks1 >> marks2;

if (marks1 > 40 || marks2 > 40)

cout << "you have passed";

else

cout << "you have failed";

//35

cout << "press 1 for gpa\npress 2 for marks:"<<endl;

int choice;

cin >> choice;

if (choice == 1)

{

cout << "enter gpa:"<<endl;

float gpa;

cin >> gpa;

if (gpa > 2)

cout << "you have passed";

else

cout << "you have failed";

}

else if (choice == 2)

{

cout << "enter marks:"<<endl;

float marks;

cin >> marks;

if (marks > 40)

cout << "you have passed";

else

cout << "you have failed";

}

else

cout << "wrong input";

//36

float marks,totalMarks,percentage, gpa;

cout << "press 1 for marks\npress 2 for gpa\n";

int choice;

cin >> choice;

if (choice == 1)

{

cout << "enter marks and total marks:";

cin >> marks >> totalMarks;

percentage = (marks / totalMarks) \* 100;

if (90 > percentage && percentage > 80)

cout << "you got an 'A' grade";

else

cout << "you did not get an 'A' grade";

}

else if (choice == 2)

{

cout << "enter gpa:";

cin >> gpa;

if(gpa>3.7 && gpa<3.8)

cout << "you got an 'A' grade";

else

cout << "you did not get an 'A' grade";

}

//37

float price, engine;

cout << "enter the price and engine capacity:";

cin >> price >> engine;

if((price>1000000 && price<2000000) || (engine>1000 && engine<1500))

cout<<"your car is a mid\_size type";

else

cout<<"your car is not a mid-size type";

//38

float price, screen;

cout << "enter price and display size:";

cin >> price >> screen;

if ((price >= 20000 && price <= 30000) || (screen >= 5 && screen <= 8))

cout << "your cell phone is a smart phone";

else

cout << "your cell phone is not a smart phone";

//39

float salary, payGrade;

cout << "enter salary and paygrade:";

cin >> salary >> payGrade;

if ((salary > 50000 && salary < 80000) || (payGrade >= 19 && payGrade <= 22))

cout << "the employee is a manager";

else

cout << "the employee is not a manager";

//40

float salary, payGrade;

cout << "enter salary and paygrade:";

cin >> salary >> payGrade;

if ((salary > 80000 && salary < 100000) || (payGrade >= 20 && payGrade <= 22))

cout << "the employee is considered executive";

else

cout << "the employee is not considered executive";

//41

float a, b;

cout << "enter two numbers:";

cin >> a >> b;

if (b == 0)

cout << a + b;

else if (b > 0)

cout << a / b;

else

cout << a \* b;

//42

// john ,lincoln and abraham roll numbers are 0000 0001 and 0002 respectively

cout << "enter roll number:";

int rollNo;

cin >> rollNo;

if (rollNo == 0000)

cout << "john";

else if (rollNo == 0001)

cout << "lincoln";

else if (rollNo == 0002)

cout << "abraham";

else

cout<<"wrong input";

//43

//city code of lahore peshawar islamabad rawalpindi are 0000 0001 0002 0003 respectively

cout << "enter code:";

int cityCode;

cin >> cityCode;

if (cityCode == 0000)

cout << "lahore";

else if (cityCode == 0001)

cout << "peshawar";

else if (cityCode == 0002)

cout << "islamabad";

else if (cityCode == 0003)

cout << "rawalpindi";

else

cout << "this city code is not available";

//44

cout << "how many numbers do you want to enter:";

int choice;

cin >> choice;

if (choice == 3) {

int a, b, c, max, min;

cout << "enter the three numbers:";

cin >> a >> b >> c;

if (a > b && a > c)

max = a;

else if (b > a && b > c)

max = b;

else

max = c;

if (a < b && a < c)

min = a;

else if (b < a && b < c)

min = b;

else

min = c;

cout << "the largest number is " << max << " and the smallest number is " << min << endl;

}

else if (choice == 4)

{

int a, b, c, d, max, min;

cout << "enter the four numbers:";

cin >> a >> b >> c >> d;

if (a > b && a > c && a >> d)

max = a;

else if (b > a && b > c && b > d)

max = b;

else if (c > a && c > b && c > d)

max = c;

else

max = d;

if (a < b && a < c && a < d)

min = a;

else if (b < a && b < c && b < d)

min = b;

else if (c < a && c < b && c < d)

min = c;

else

min = d;

cout << "the largest number is " << max << " and the smallest number is " << min << endl;

}

else

cout << "wrong input";

//45

int weekNum;

cout << "enter the day number of the week";

cin >> weekNum;

if (weekNum == 1)

cout << "sunday";

else if (weekNum == 2)

cout << "monday";

else if (weekNum == 3)

cout << "tuesday";

else if (weekNum == 4)

cout << "wednesday";

else if (weekNum == 5)

cout << "thursday";

else if (weekNum == 6)

cout << "friday";

else if (weekNum == 7)

cout << "saturday";

else

cout << "wrong input";

//46

cout<<"enter number:";

int num;

cin>>num;

if(num==1)

{

cout<<"january"<<endl;

}

else if(num=2)

{

cout<<"february"<<endl;

}

else if(num==3)

{

cout<<"march"<<endl;

}

else if(num==4)

{

cout<<"april"<<endl;

}

else if(num==5)

{

cout<<"may"<<endl;

}

else if(num==6)

{

cout<<"june"<<endl;

}

else if(num==7)

{

cout<<"july"<<endl;

}

else if(num==8)

{

cout<<"august"<<endl;

}

else if(num==9)

{

cout<<"september"<<endl;

}

else if(num==10)

{

cout<<"october"<<endl;

}

else if(num==11)

{

cout<<"november"<<endl;

}

else if(num==12)

{

cout<<"december"<<endl;

}

else

cout<<"enter a number between 1 - 12";

//47

cout << "enter annual salary:";

float salary;

cin >> salary;

cout << "enter pay type:";

float payType;

cin >> payType;

if (payType == 1)

{

cout << "your weekly base pay is:" << salary / 52 << endl;

}

else if (payType == 2)

{

cout << "your bi-monthly base pay is:" << salary / 24 << endl;

}

else

{

cout << "your monthly base pay is:" << salary / 12 << endl;

}

//48

cout << "enter marks:";

int marks;

cin >> marks;

if (marks > 90)

cout << "A+";

else if (marks > 85)

cout << "A";

else if (marks > 75)

cout << "B";

else if (marks > 65)

cout << "c";

else if (marks > 50)

cout << "d";

else

cout << "fail";

//49

cout << "enter two numbers:";

int a, b;

cin >> a >> b;

cout << "for addition press 1\

\nfor subtraction press 2\

\nfor multiplication press 3\

\n for division press 4" << endl;

int choice;

cin >> choice;

if (choice == 1)

cout << a + b;

else if (choice == 2)

cout << a - b;

else if (choice == 3)

cout << a \* b;

else

cout << a / b;

//50

float temperature, convertedTemp;

int conversionType;

cout << "Enter the temperature: ";

cin >> temperature;

cout << "Enter the conversion type: ";

cin >> conversionType;

switch (conversionType)

{

case 1:

convertedTemp = 32 + (temperature \* 1.8);

cout << temperature << " Celsius is " << convertedTemp << " Fahrenheit" << endl;

break;

case 2:

convertedTemp = (temperature - 32) / 1.8;

cout << temperature << " Fahrenheit is " << convertedTemp << " Celsius" << endl;

break;

case 3:

convertedTemp = temperature - 273.15;

cout << temperature << " Kelvin is " << convertedTemp << " Celsius" << endl;

break;

case 4:

convertedTemp = (temperature \* 5) / 9;

cout << temperature << " Rankine is " << convertedTemp << " Celsius" << endl;

break;

default:

cout << "Invalid conversion type." << endl;

}

//51

float weight, convertedWeight;

int conversionType;

cout << "Enter the weight in kilograms: ";

cin >> weight;

cout << "Enter the conversion type: ";

cin >> conversionType;

switch (conversionType) {

case 1:

convertedWeight = 1000 \* weight;

cout << weight << " kilograms is " << convertedWeight << " grams" << endl;

break;

case 2:

convertedWeight = 1000000 \* weight;

cout << weight << " kilograms is " << convertedWeight << " milligrams" << endl;

break;

case 3:

convertedWeight = 1000 \* 15.43 \* weight;

cout << weight << " kilograms is " << convertedWeight << " grains" << endl;

break;

case 4:

convertedWeight = 2.20 \* weight;

cout << weight << " kilograms is " << convertedWeight << " pounds" << endl;

break;

default:

cout << "Invalid conversion type." << endl;

}

//52

cout << "enter till how many numbers you want to display"<<endl;

int n;

cin >> n;

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

cout << i<<endl;

//53

cout << "enter till how many numbers you want to find the sum:" << endl;

int n;

int sum = 0;

cin >> n;

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

{

sum = sum + i;

}

cout << sum << endl;

//54

cout << "enter number:"<<endl;

int n;

int prod = 1;

cin >> n;

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

prod = prod \* i;

cout << prod;

//55

cout << "enter base and power:" << endl;

int x, y;

cin >> x >> y;

int ans = 1;

for (int i = 1; i <= y; i++)

ans = ans \* x;

cout << "answer = "<<ans;

//56

cout << "enter n" << endl;

int n;

int sum = 0;

cin >> n;

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

{

if (i % 2 == 0)

sum = sum + i;

}

cout << "the sum is:" << sum;

//57

cout << "enter n:" << endl;

int n;

int sum=0;

cin >> n;

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

if (i % 2 == 1)

sum = sum + i;

cout << "the sum is:" << sum;

//58

cout << "enter n:" << endl;

int n;

cin >> n;

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

if (i % 2 == 0)

cout << i << endl;

//59

cout << "enter n:" << endl;

int n;

cin >> n;

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

if (i % 2 == 1)

cout << i << endl;

//60

cout << "enter starting number and ending number:";

int a, b;

int sum = 0;

cin >> a >> b;

for (int i = a+1; i < b; i++)

sum = sum + i;

cout << "sum is:" << sum;

//61

cout << "enter number:";

int a;

cin >> a;

cout << "enter n :";

int n;

cin >> n;

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

{

cout << a << "x" << i << "=" << a \* i<<endl;

}

//62

cout << "enter n:";

int n,sum=0;

cin >> n;

for (int i = 26; i < 26+n; i++)

sum = sum + i;

cout << "the sum is:" << sum;

//63

cout << "enter n:";

int n;

int a = 1;

cin >> n;

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

{

cout << a<<endl;

a = a + i;

}

//64

int num1 = 0, num2 = 1, num3;

cout << "enter n:";

int n;

cin >> n;

cout << num1 << endl << num2<<endl;

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

{

num3 = num1 + num2;

num1 = num2;

num2 = num3;

cout << num3 << endl;

}

//65a

cout << "enter n:";

int n;

int a = 1;

float sum = 0;

cin >> n;

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

{

sum = sum + (float)a / i;

cout << sum<<endl;

}

cout << "the sum is"<<sum;

//65b

cout << "enter n:"<<endl;

int n;

int a = 1;

float sum=0;

cin >> n;

for (int i = 1; i <= 2\*n; i++)

{

if (i % 2 == 1)

sum = sum + (float)a / i;

}

cout << "sum:" << sum;

//65c

cout << "enter n:" << endl;

int n;

int a = 1;

float sum = 0;

cin >> n;

for (int i = 1; i <= 2 \* n; i++)

{

if (i % 2 == 0)

sum = sum + (float)a / i;

cout << sum << endl;

}

cout << "sum:" << sum;

//66a

cout << "enter n:" << endl;

int n;

cin >> n;

float prod = 1;

int b = 4;

int a = 1;

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

{

prod = prod \* (float)a / b;

cout<< prod << endl;

}

//66b

cout << "enter n:";

int n;

cin >> n;

float prod=1;

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

{

prod = prod \* (float)1 / 3;

cout << prod << endl;

}

//66c

cout << "enter n:";

int n;

cin >> n;

float prod = 1;

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

{

prod = prod \* (float)1 / 5;

cout << prod << endl;

}

//67

cout << "enter n:";

int n;

cin >> n;

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

{

if (i % 2 == 1)

cout << "odd:" << i << endl;

else

cout << "even:" << i << endl;

}

//68

int num;

int n;

cout << "enter the number:";

cin >> num;

cout << "enter n:";

cin >> n;

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

{

if (i % num == 0)

cout << i << " is divisible by " << num << endl;

}

//69

cout << "enter n:";

int n;

cin >> n;

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

{

if (i % 2 == 1)

{

if (i % 3 == 0)

cout << i<<endl;

}

}

//70

cout << "enter starting and ending numbers:";

int n1,n2;

int sum = 0;

cin >> n1>>n2;

for (int i = n1; i <= n2; i++)

{

if (i % 2 == 0)

sum = sum + i;

}

cout << sum;

//71

cout << "enter starting and ending numbers:";

int n1, n2;

int sum = 0;

cin >> n1 >> n2;

for (int i = n1; i <= n2; i++)

{

if (i % 2 == 1)

sum = sum + i;

}

cout << sum;

//73

cout << "enter number:";

int num;

cin >> num;

if (num > 0)

{

cout << "enter n :";

int n;

cin >> n;

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

{

cout << num << "x" << i << "="<<i \* num << endl;

}

}

else

cout << "wrong input";

//75

cout << "enter number:";

int num;

cin >> num;

bool flag = true;

if (num == 0 || num == 1)

flag = false;

else

for (int i = 2; i <= num - 1; i++)

{

if (num % i == 0)

{

flag = false;

break;

}

}

if (flag)

cout << "it is a prime number";

else

cout << "it is not a prime number";

//76

int num,i;

bool prime=true;

cout << "Enter a positive integer: ";

cin>>num;

if(num>5)

{

for(i=2; i<=num/2;i++)

{

if(num%i==0)

{

prime=false;

break;

}

}

if(prime==1)

cout << "First divisor of "<<num<< " is "<<num;

else if(prime==0 && num%2==0)

cout << "First divisor of "<<num<< " is 2";

else if(prime==0 && num%2==1)

cout << "First divisor of "<<num<< " is 3";

}

else

cout << "Enter a number that is greater than 5";

//77

cout << "enter first and second number:";

int a, b;

cin >> a >> b;

cout << "enter number to be divided by:";

int num;

cin >> num;

if (num == 0)

cout << "invalid input";

else

for (int i = a + 1; i <= b - 1; i++)

{

if (i % num == 0)

cout << i << " is divisible by " << num << endl;

}

//78

cout << "enter two numbers:";

int n1,n2;

cin >> n1 >> n2;

for (int i = n1+1; i <= n2-1; i++)

{

if (i % 5 == 0 || i % 10 == 0)

cout << i << endl;

}

//79

cout << "enter n:";

int n;

cin >> n;

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

{

if (i % 2 == 0 && i % (2 \* 2 \* 2) == 0)

cout << i << endl;

}

//80

cout << "enter number:";

int num;

cin >> num;

if (num == 0)

cout << "invalid input";

else

{

cout << "enter n:";

int n;

cin >> n;

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

{

if (i % num == 0 && i % (num \* num) == 0)

cout << i << endl;

}

}

//81

cout << "enter number:";

int num;

cin >> num;

if (num == 0)

cout << "invalid input";

else

{

cout << "enter n:";

int n;

cin >> n;

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

{

if (i % num == 0 && i % (num \* num) == 0 && i%(num\*num\*num)==0)

cout << i << endl;

}

}

//82

cout << "enter first and second number:";

int a, b, prod=1;

cin >> a >> b;

for (int i = a + 1; i <= b - 1; i++)

{

if (i % 3 == 0 || i % 7 == 0)

prod = prod \* i;

cout << prod << endl;

}

cout << "the product is:" << prod;

//83

int num, n;

cout << "Enter the number: ";

cin >> num;

cout << "Enter n: ";

cin >> n;

int rand;

for ( int i = 2; i <= n; i++) {

int power = 1;

while (pow(i, power) <= num)

{

power++;

rand = power;

}

cout << i << " raised to the power " << rand << endl;

}

//84

cout << "enter the i-th power and n:";

int n,i,prod,sum=0;

cin >> i >> n;

for (int z = 1; z <= n; z++)

{

prod = 1;

for (int j = 1; j <= i; j++)

{

prod = prod \* z;

}

sum = sum + prod;

}

cout << "the sum is " << sum;

//85

cout << "enter n:";

int n;

cin >> n;

cout << "0 is not a prime number\

\n1 is not a prime number" << endl;

for (int i = 2; i <= n; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

cout << i << " is a prime number"<<endl;

else

cout << i << " is not a prime number"<<endl;

}

//86

cout << "enter first and second number:";

int n1, n2;

cin >> n1 >> n2;

bool flag;

for (int i = n1 + 1; i <= n2 - 1; i++)

{

flag = true;

for (int j = 2; j < i; j++)

{

if (i % j == 0)

{

cout << "not a prime number : " << i << endl;

flag = false;

break;

}

}

if (flag)

cout << "prime number:" << i<<endl;

}

//87

cout << "enter number of terms:";

int n;

cin >> n;

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

{

cout << pow(i, i)<<endl;

}

//88

cout << "enter n:";

int n;

cin >> n;

cout << "2" << endl;

for (int i = 3; i <= n; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

{

cout << i << endl;

}

}

//89

cout << "do you want to find first n odd prime numbers (press 1) or\nodd prime numbers between two integers(press2):"<<endl<<endl;

int choice;

cin >> choice;

if (choice == 1) {

cout << "enter n:";

int n;

cin >> n;

for (int i = 3; i <= n; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

{

if (i % 2 == 1)

{

cout << i << endl;

}

}

}

}

else

cout << "enter enter first and second number:"<<endl;

int a, b;

cin >> a >> b;

if (a < 2)

a = 2;

for (int i = a+1; i <= b-1 ; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

{

if (i % 2 == 1)

{

cout << i << endl;

}

}

}

//90

cout << "do you want to find first n even prime numbers (press 1) or\n even prime numbers between two integers(press2):" << endl << endl;

int choice;

cin >> choice;

if (choice == 1) {

cout << "enter n:";

int n;

cin >> n;

cout << "\n2";

for (int i = 3; i <= n; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

{

if (i % 2 == 0)

{

cout << i << endl;

}

}

}

}

else

cout << "enter enter first and second number :" << endl;

int a, b;

cin >> a >> b;

if (a < 2)

{

cout << "2"<<endl;

a = 2;

}

for (int i = a + 1; i <= b - 1; i++)

{

bool flag = true;

for (int j = 2; j <= i - 1; j++)

{

if (i % j == 0)

{

flag = false;

break;

}

}

if (flag)

{

if (i % 2 == 0)

{

cout << i << endl;

}

}

}

//91

cout << "enter n:";

int n;

cin >> n;

int sum = 0;

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

{

int prod = 1;

for (int j = 1; j <= i; j++)

{

prod = prod \* j;

}

sum = sum + prod;

}

cout << "the total sum is:" << sum;

//92

cout << "enter n:";

int n;

cin >> n;

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

{

for (int j = 1; j <= 10; j++)

{

cout << i << "x" << j << "=" << i \* j<<endl;

}

cout << "\n\n";

}

//93

int choice;

do

{

cout << "enter number"<<endl;

int a;

cin >> a;

int square = a \* a;

cout << "square:" << square<<endl;

cout << "if you want to try again press 1"<<endl;

cin >> choice;

} while (choice == 1);

int choice;

do

{

cout << "enter two numbers" << endl;

int a,b;

cin >> a>>b;

int sum = a +b;

cout << "sum:" << sum << endl;

cout << "if you want to try again press 1" << endl;

cin >> choice;

} while (choice == 1);

//95

int choice;

do

{

cout << "enter number:"<<endl;

int a;

cin >> a;

if (a < 0)

cout << "the number is negative"<<endl;

else

cout << "the number is positive"<<endl;

cout << "if you want to try again press 1:"<<endl;

cin >> choice;

} while (choice == 1);

//96

int choice;

do

{

cout << "enter a number :"<<endl;

int a;

bool flag = true;

cin >> a;

if (a == 2)

cout << "it is a prime number";

else

{

for (int i = 2; i <= a - 1; i++)

{

if (a % i == 0)

{

flag = false;

break;

}

}

if (flag)

{

cout << "the number is a prime number" << endl;

}

else

{

cout << "the number is not a prime number" << endl;

}

}

if (a == 0 || a == 1)

cout << "the number is not a prime number" << endl;

cout << "if you want to try again press 1"<<endl;

cin >> choice;

} while (choice == 1);