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The Islamia University

of BWP.

RYK Campus

Assignment No 02

Subject :

Programming Fundamental

Submitted to:

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Submitted by:

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1) Total marks, Percentage and grade

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int Eng, Urdu, Math, Phy, Comp;
```

```
    cout << "Enter your Eng marks:";
```

```
    cin >> Eng;
```

```
    cout << "Enter your Urdu marks:";
```

```
    cin >> Urdu;
```

```
    cout << "Enter your Math marks:";
```

```
    cin >> Math;
```

```
    cout << "Enter your Phy marks:";
```

```
    cin >> Phy;
```

```
    cout << "Enter your Comp marks:";
```

```
    cin >> Comp;
```

```
    int total;
```

```
    total = Eng + Urdu + Math + Phy + Comp;
```

```
    cout << "total:";
```

```
    int per;
```

```
    per = total / 500 * 100;
```

```
    if (per <= 90)
```

sharp { bad address, editor, etc,

cout << "Out Standing A+";

}

else if (per >= 80 <= 89)

{

cout << "Excellent A";

}

else if (per >= 70 <= 79)

{

cout << "Good B";

}

else if (per >= 60 <= 69)

{

cout << "Fair C";

}

else if (per >= 50 <= 49)

{

cout << "Satisfactory D";

}

else

{

cout << "Fail F";

}

return 0;

}

2) Less than 60% Print Pass otherwise
Fail

#include <iostream>

using namespace std;

int main()

{

float Home, Assignment, Test, Total;

cout << "Enter Home number";

cin >> Home;

cout << "Enter assignment number";

cin >> Assignment;

cout << "Enter test number";

cin >> Test;

int obt;

obt = Home + Assignment + Test;

total = 0;

if (obt/total * 100 > 60)

{

cout << "You are Pass";

}

else

{

cout <"You are fail";

}

Return 0;

}

3) Read five integers and Find largest and smallest.

#include <iostream>

using namespace std;

int main()

{

int Num1, Num2, Num3, Num4, Num5;

cout << "Enter Num1";

cin >> Num1;

cout << "Enter Num2";

cin >> Num2;

cout << "Enter Num3";

cin >> Num3;

cout << "Enter Num4";

cin >> Num4;

cout << "Enter Num5";

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cin > Num5;

largest = Num1;

smallest = Num1;

if (Num1 > largest)

{

largest = Num1;

}

if (Num2 > largest)

{

largest = Num2;

}

if (Num3 > largest)

{

largest = Num3;

}

if (Num4 > largest)

{

largest = Num4;

}

if (Num5 > largest)

{

largest = Num5;

}

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if (Num 1 < smallest)

{

smallest = Num 1;

}

if (Num 2 < smallest)

{

smallest = Num 2;

}

if (Num 3 < smallest)

{

smallest = Num 3;

}

if (Num 4 < smallest)

{

smallest = Num 4;

}

if (Num 5 < smallest)

{

smallest = Num 5;

}

cout << "largest is" << largest << "\n smallest
is" << smallest;

Return 0;

}

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4) Even or odd

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int n;
```

```
    cout << "Enter an integer:";
```

```
    cin >> n;
```

```
    if (n % 2 == 0)
```

```
{
```

```
        cout << n << " is even";
```

```
}
```

```
    else
```

```
{
```

```
        cout << n << " is odd";
```

```
}
```

```
    return 0;
```

```
}
```

5) Four function calculator by using If-else.

```
#include <iostream>  
using namespace std;  
  
int main()  
{  
    int a, b; //  
    char oper;  
    cout << "Enter first value";  
    cin >> a;  
    cout << "Enter second value";  
    cin >> b;  
    cout << "Enter the operator : +, -, *, /";  
    cin >> a >> b;  
    if (oper == '+')  
    {  
        cout << a << "+" << b << "=";  
    }  
    else if (oper == '-')  
    {  
        cout << a << "-" << b << "=";  
    }  
    else if (oper == '*')  
    {  
        cout << a << "*" << b << "=";  
    }  
    else if (oper == '/')  
    {  
        cout << a << "/" << b << "=";  
    }  
}
```

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{ cout << "operator waiting for";

cout << a << "*" << b << "="; return;

}

- else if (opex = a/b)

{

cout << a << "/" << b << "=";

}

else

{

cout << "operator error";

}

return 0;

}

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6)

Four function calculator by using switch

```
#include <iostream>
```

```
using namespace std;
```

```
int main ()
```

```
{
```

```
char oper;
```

```
float num1, num2;
```

```
cin >> oper;
```

```
switch (oper)
```

```
{
```

```
    case '+':
```

```
        cout << num1 << "+" << num2 << "=" << num1
```

```
        + num2;
```

```
        break;
```

```
    case '-':
```

```
        cout << num1 << "-" << num2 << "="
```

```
        << num1 - num2;
```

```
        break;
```

```
    case '*':
```

```
        cout << num1 << "*" << num2 << "="
```

```
        << num1 * num2;
```

```
        break;
```

case '1':

cout << num1 << " / " << num2 << "="

<< num1 / num2;

break;

default:

cout << "Error! operator is not correct";

break;

}

return 0; // returning small function

}

7) Year is leap year or not use operators
dd and ||

#include <iostream>

using namespace std;

int main ()

{

int year;

cout << "Enter a year";

cin >> year;

if (year % 4 == 0 || year % 400 == 0)

{

cout << year << " is a leap year";

}

else

{

cout << year << " is not a leap year";

}

return 0;

}

8) Without using operators (through the conditional)

```
#include <iostream>
```

```
using namespace std; // good style
```

```
int main ()
```

{

int year;

cout << "Enter a year";

cin >> year;

if (year % 4 == 0)

{

cout << year << " is a leap";

}

else if (year % 400 == 0)

{

Q) without year tick "is not a leap";

{

Return 0;

{

9) Print ASCII value of Character

#include <iostream>

using namespace std;

int main ()

{

char c;

cout <"Enter a character";

cin >> c;

cout <"ASCII value of "<c<" is "

<< int(c);

Return 0;

{

10) Convert Fahrenheit to Celsius OR Celsius to Fahrenheit.

```
#include <iostream>
```

```
using namespace std;
```

```
int stdmain()
```

```
{ return 0;  You will get T22A this? (a)
```

```
    int response;
```

```
    double temperature;
```

```
    cout << "In type 1 to convert Fahrenheit  
to celsius" << "In type 2 to convert  
celsius to fahrenheit";
```

```
    cin >> temperature response;
```

```
    if (response)
```

```
{
```

```
        cout << "Enter temperature in fahrenheit";
```

```
        cin >> temperature;
```

```
        cout << "in celsius that" << 5.0 / 9.0 * temp  
(temperature - 32.0);
```

```
}
```

```
else
```

```
{
```

```
    cout << "Enter temperature in celsius";
```

```
    cin >> temperature;
```

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cout << "in fahrenheit that" << 9.0
'5.0 * temperature + 32.0;

}

Return 0;

}

11) Convert MILITARY TIME to the STANDARD TIME

```
#include <iostream>
```

```
using namespace std;
```

```
int main ()
```

```
{
```

```
int Hours, Mins, Secs;
```

```
cout << "This program converts Military  
time to Standard time" << endl;
```

```
cout << "Enter Military Time in hh:mm:ss
```

```
format :" << endl;
```

```
cin >> Hours >> Mins >> Secs;
```

```
if (Hours >= 13 && Hours <= 24 && Mins >= 0
```

```
&& Mins <= 60 && Secs >= 0 && Secs <= 60)
```

```
{
```

```
Hours = Hours - 12;
```

```
cout << Hours << ":" << Mins << ":" << Secs << "PM";
```

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}

else if (Hours > 0 && Hours <= 12 &&

Mins >= 0 && Mins <= 60 && Secs >= 0

&& Secs <= 60)

{

cout << Hours << ":" << Mins << ":" << Secs << "AM";

} at 3MITE GRADUATION

else if (Hours == 0 && Mins >= 0 && Mins <= 60

&& Secs >= 0 && Secs <= 60)

{

Hours = Hours + 0;

cout << "12:" << Mins << ":" << Secs << "AM";

}

else

{

cout << "Wrong Entry";

}

Return 0;

}

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12)

Character is Capital or Small

#include <iostream>

Using namespace std;

int main()

{

char ch;

cout << "Enter any character";

cin >> ch;

if (ch >= 65 && ch <= 90)

{

cout << "character is a capital letter";

}

else if (ch >= 97 && ch <= 122)

{

cout << "character is a small letter";

}

else if (ch >= 48 && ch <= 57)

{

cout << "character is a digit";

}

else if ((ch > 0 && ch <= 47) || (ch >= 58 &&

ch <= 64) || (ch >= 91 && ch <= 96))

```
if (ch >= '0' & ch <= '9') cout << "Digit" ;
```

{

cout << "character is a special symbol";

}

Return 0;

}

13) Check Vowel or Consonants

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

{

```
char c;
```

```
bool islowercasevowel, isuppercasevowel;
```

```
cout << "Enter an Alphabet :";
```

```
cin >> c;
```

```
islowercasevowel = (c == 'a' || c == 'e' || c == 'i'  
|| c == 'o' || c == 'u');
```

```
isuppercasevowel = (c == 'A' || c == 'E' || c == 'I'  
|| c == 'O' || c == 'U');
```

```
if (!isalpha(c))
```

{

cout << "Error! Non-alphabetic
character");

}

else if (islowercasevowel || isuppercasevowel)

{

cout << c << "is a vowel";

}

else

{

cout << c << "is a consonant";

}

Return 0;

{